Idaho's 2010 Integrated Report

Final

State of Idaho
Department of Environmental Quality
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Boise, Idaho 83706

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Abbreviations, Acronyms, and Symbols

§305(b)	Refers to section 305 subsection (b) of the Clean Water Act, or a report of the water quality of all state waters required by this section
§303(d)	Refers to section 303 subsection (d) of the Clean Water Act, or a list of impaired water bodies still requiring a total maximum daily load required by this section
ADB	EPA Assessment Database
AU	assessment unit
BURP	Beneficial Use Reconnaissance Program
°C	degrees Celsius
CFR	Code of Federal Regulations
CWA	Clean Water Act
DEQ	Idaho Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
GIS	geographic information system
HUC	hydrologic unit code
IDAPA	Refers to citations of Idaho administrative rules
IFCAP	Idaho Fish Consumption Advisory Program
kg	kilograms
MDAT	maximum daily average temperature
MDMT	maximum daily maximum temperature
MWAT	maximum weekly average temperature
MWMT	maximum weekly maximum temperature
MeHg	methylmercury
NHD	National Hydrography Dataset
RfD	reference dose
SE	standard error
SFI	stream fish index
SHI	stream habitat index
SMI	stream macroinvertebrate index
TMDL	total maximum daily load
U.S.C.	United States Code
USFS	U.S. Forest Service
WBAG II	*Water Body Assessment Guidance*, Second Edition
WBID	water body identification number
WQS	Idaho's water quality standards (IDAPA 58.01.02)

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Introduction

The Integrated Report is a compilation of information pertaining to the water quality status of all Idaho waters and is a requirement of the Clean Water Act. The report is submitted to the U.S. Environmental Protection Agency (EPA) and made available to the public. This document presents the principles and policies used by the Idaho Department of Environmental Quality (DEQ) to compile the 2010 Integrated Report, the categorized lists showing the current status of all state waters, and all supporting information, including maps showing the status of all Idaho waters (Appendix A). Topics addressed by the principles and policies include the following:

- EPA requirements for the Integrated Report
- The five categories of the Integrated Report
- Relevant state policies affecting the development of the Integrated Report
- The role of public comment in the Integrated Report

Note: These principles and policies do not supersede the *Water Body Assessment Guidance, Second Edition* (WBAG II) (Grafe et al. 2002); they provide additional guidance for determining beneficial use support status and water quality standards exceedances for listing of impaired waters.

The Integrated Report is a Federal Requirement

The Clean Water Act (CWA) requires the state to prepare a report listing a) the current conditions of all state waters and b) those waters that are impaired and needing a total maximum daily load (TMDL). The first list is called the §305(b) list and the second is called the §303(d) list. Both lists are named in accordance with the sections of the CWA where they are defined; together they are known as the Integrated Report (Figure 1). Those impaired waters listed on the §303(d) list are just some of the state's waters, or simply a subset of those on the §305(b) list.

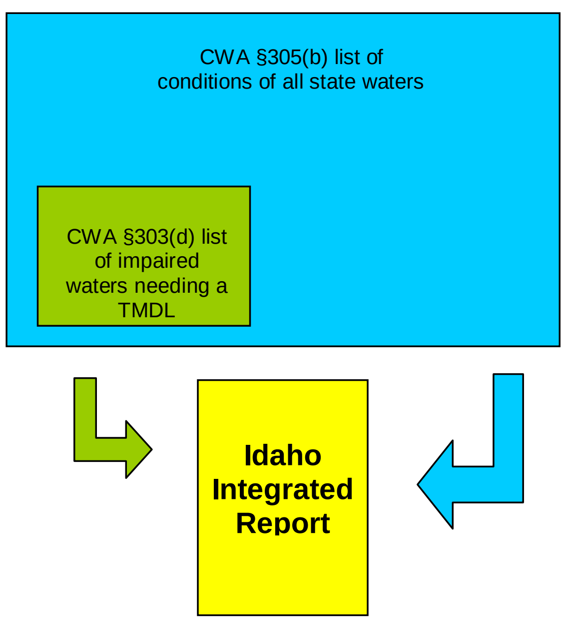

Figure 1. Components of the Integrated Report

Every two years, the state must furnish an Integrated Report to the EPA categorizing state waters and informing the public of the status of state waters. (Additional requirements for the Integrated Report, as detailed in EPA guidance documents [EPA, 2005, 2006, and 2009], are listed under "U.S. Environmental Protection Agency Requirements for the 2010 Integrated Report," page 3 of this report.)

The Integrated Report Categorizes State Waters

The Integrated Report places all of the state's waters into at least one of five different categories (Figure 2):

- *Category 1* waters are wholly within a designated wilderness or inventoried roadless area where water quality standards are presumed to be attained for all beneficial uses.
- *Category 2* waters are fully supporting those beneficial uses that have been assessed. The use attainment of the remaining beneficial uses has not been determined due to insufficient data (or no data) and information.
- *Category 3* waters have insufficient data (or no data) and information to determine if beneficial uses are being attained.
- *Category 4* waters do not support a water quality standard for one or more beneficial uses, but they do not require the development of a TMDL. There are three subcategories under Category 4:
  - *Category 4a* waters have had a TMDL completed and approved by EPA.
  - *Category 4b* waters have had pollution control requirements other than a TMDL placed on them, and these waters are reasonably expected to attain the water quality standard within a reasonable period of time.
  - *Category 4c* waters are those failing to meet applicable water quality standards due to other types of pollution, not a pollutant.
- *Category 5* waters do not meet applicable water quality standards for one or more beneficial uses due to one or more pollutants; therefore, an EPA-approved TMDL is needed. Category 5 water bodies make up the §303(d) list of impaired waters.

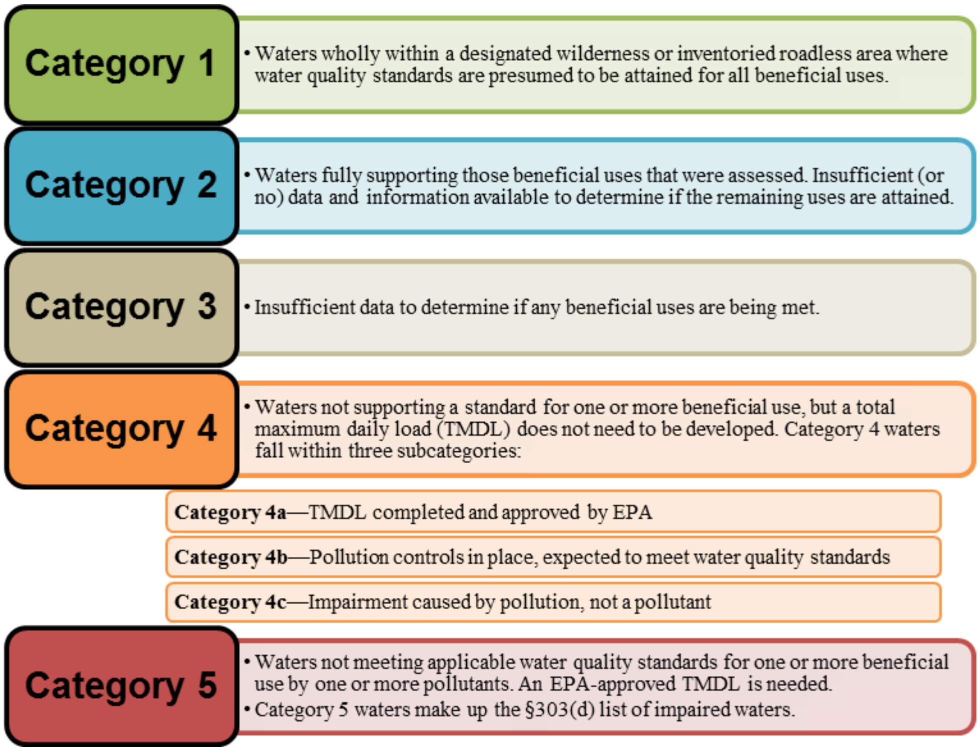

Figure 2. Categories of waters listed in the Integrated Report

The Integrated Report Informs the Public and Facilitates Comment

The Integrated Report serves several functions:

- It is a reporting requirement of the CWA.
- It informs the public about the status of state waters, enabling interested parties to comment on Idaho's §303(d) list of impaired waters and provide any relevant data.
- It provides a unique opportunity for the public to understand the overall status of Idaho's water quality and gain a better understanding of how DEQ is maintaining, improving, and protecting Idaho's waters.

U.S. Environmental Protection Agency Requirements for the 2010 Integrated Report

EPA requirements for the Integrated Report come from several sources (Figure 3):

- The CWA (33 U.S.C § 1251 et seq. (1972)), which is the major environmental law requiring the Integrated Report.
- EPA regulations contained within Title 40 of the Code of Federal Regulations (CFR) (part 130.0 through 130.12), which are the set of federal regulations implementing the CWA.
- EPA guidance developed to assist in the preparation of the 2006 Integrated Report (EPA 2005), which is supplemented by EPA's 2010 memorandum (EPA 2009) and EPA's information for the 2008 Integrated Report (EPA 2006).

These requirements are described in more detail in the following sections.

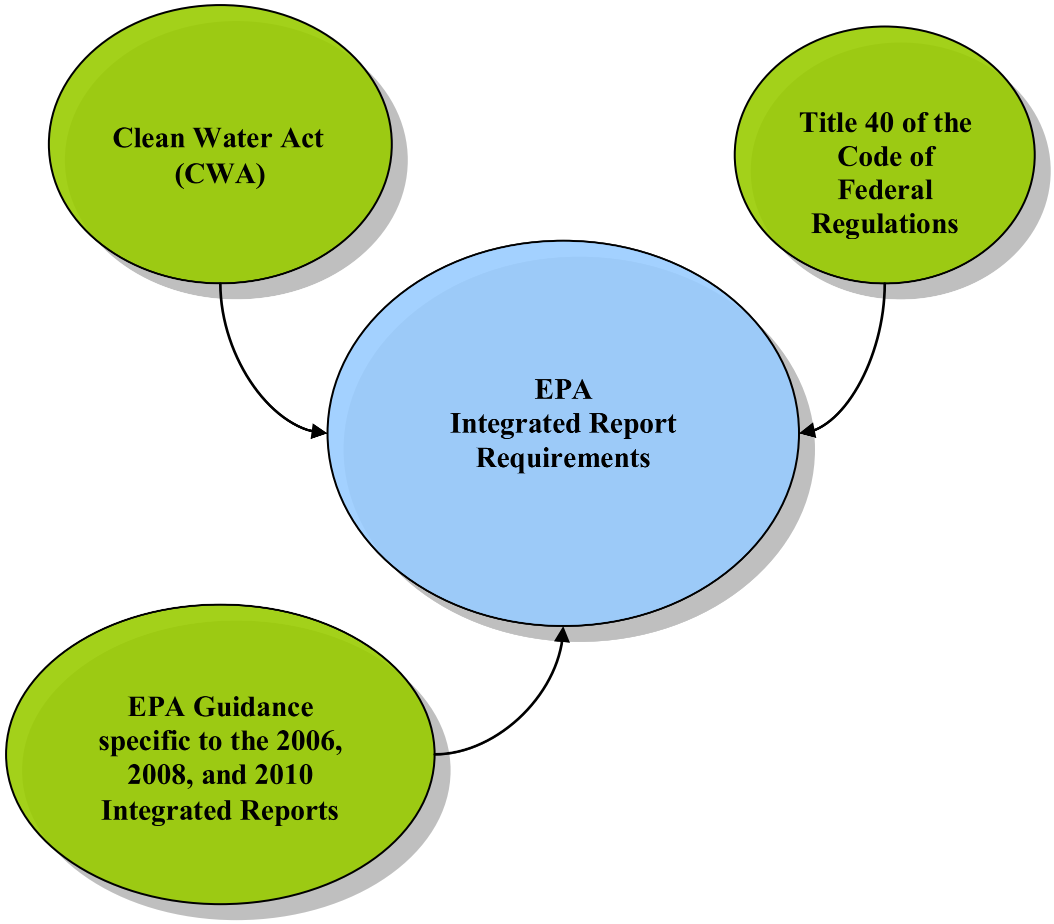

Figure 3. EPA requirements for the 2010 Integrated Report come from several sources

Clean Water Act Requirements

The CWA calls on the states to conduct specific activities to monitor and protect their waters:

- Developing and adopting water quality standards to protect beneficial uses (Section 303)
- Establishing monitoring programs to collect and analyze data regarding water quality (Section 106)
- Reporting on the status of waters and the degree to which designated uses are supported (Section 305(b))
- Identifying and prioritizing waters that are not meeting water quality standards (Section 303(d))

Title 40 of the Code of Federal Regulations Requirements

In addition, EPA regulations contained within 40 CFR 130.7(b) describe requirements for identifying and establishing priorities for the water quality–limited segments still requiring TMDLs:

> (1) Each State shall identify those water quality-limited segments still requiring TMDLs within its boundaries for which:
>
> (i) Technology-based effluent limitations are required by sections 301(b), 306, 307, or other sections of the Act [CWA];
>
> (ii) More stringent effluent limitations (including prohibitions) required by either State or local authority preserved by section 510 of the Act, or Federal authority (law, regulation, or treaty); and
>
> (iii) Other pollution control requirements (e.g., best management practices) required by local, State, or Federal authority are not stringent enough to implement any water quality standards (WQS) applicable to such waters.
>
> (2) Each State shall also identify on the same list developed under paragraph (b)(1) of this section [40 CFR 130.7 (b)(1)] those water quality-limited segments still requiring TMDLs or parts thereof within its boundaries for which controls on thermal discharges under section 301 or State or local requirements are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

U.S. Environmental Protection Agency Guidance

Specific guidance for preparing the Integrated Report is provided in EPA's *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act*, issued on July 29, 2005 (EPA 2005). This guidance is supplemented by EPA's *Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*, issued May 5, 2009, as well as *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*, issued October 12, 2006 (EPA 2009 and 2006). These documents are available on the following EPA website:

www.epa.gov/owow/tmdl/guidance.html

The Five Categories of the Integrated Report

Information used in preparing the Integrated Report is compiled by DEQ using EPA's *Assessment Database* (ADB). The ADB provides an all-electronic report organized into five categories, each of which is numbered in accordance with the five categories defined under "The Integrated Report Categorizes State Waters," page 2, and detailed below.

Category 1: Waters of the State Wholly within Designated Wilderness or Inventoried Roadless Area Where Standards are Presumed to be Attained

Category 1 waters are wholly within a designated wilderness or inventoried roadless area where water quality standards are presumed to be attained for all beneficial uses. (See "Designated Wilderness and Inventoried Roadless Areas", page 31, for definitions and an explanation.)

> **Note:** The only distinction between Category 1 and Category 2 of the Integrated Report is the wilderness and roadless status.

The number of assessment units (AUs) currently in Category 1 is 427 out of 5,746 total AUs statewide. There are 4,797 miles of rivers and 2,185 acres of freshwater lakes that are attaining all water quality standards and are wholly within wilderness or roadless areas. This count of AUs is based on a review of updated wilderness and roadless geographic information system (GIS) coverage made available by the U.S. Forest Service (USFS) since the 2008 Integrated Report.

An additional 181 AUs have been identified for inclusion in Category 1, but ADB will not be updated with these changes until the 2012 reporting cycle. These AUs will remain in Category 3 until that time. Refer to Appendix B for the list of newly added wilderness/roadless AUs.

The list of Category 1 AUs can be viewed in Appendix C.

Category 2: Waters of the State Attaining Some Standards

Category 2 waters fully support those beneficial uses that were assessed. For these water bodies, no Tier I data (see "Data Quality," page 17, for a description of data tiers) submitted to DEQ for assessment indicates impairment.

The number of AUs currently in Category 2 is 1,251 out of 5,746 total AUs statewide. There are 23,097 miles of rivers and 19,849 acres of freshwater lakes that are attaining most standards.

The list of Category 2 AUs can be viewed in Appendix D.

Category 3: Waters of the State with Insufficient Data and Information to Determine if Any Standards are Attained

Category 3 water bodies meet two criteria:

- No Tier I data indicate an impairment of beneficial uses.
- Not enough data existed at the time of assessment to make a determination using DEQ's WBAG II (Grafe et al. 2002) that standards have been attained.

When DEQ concludes that the available data and information is insufficient, reasons may include (but are not limited to) the following:

- The existing and readily available data and information were collected using unacceptable quality assurance / quality control procedures.

- The quality of the existing and readily available data and information, regardless of quantity thresholds, is inadequate to provide an accurate assessment.
- The existing and readily available data and information is not representative of current conditions of the water body. This rationale might include a determination that significant land-use changes have occurred in the watershed changing the hydrology and nonpoint source loading, point source discharges have been removed, new discharges are now operating, or the locations of sampling stations did not reflect the character of the segment (e.g., sampling may have been limited to locations near discharge outfalls).

Category 3 is meant to be temporary until sufficient data and information are obtained to support a designated use attainment determination; however, in Idaho an AU may remain in Category 3 under any of the following circumstances: 1) the stream has no flow when visited by DEQ (i.e., is intermittent), 2) access to the monitoring site was denied, or 3) the monitoring site is inaccessible.

When DEQ encounters any of these circumstances, every attempt will be made in subsequent years to collect sufficient data and information to support a designated use attainment determination for these AUs.

The number of AUs currently in Category 3 is 2,102 out of 5,746 total AUs statewide. There are 33,355 miles of rivers and 186,677 acres of freshwater lakes that have insufficient data or information to determine if standards are being met.

The list of Category 3 AUs can be viewed in Appendix E.

Category 4: Waters of the State Impaired for One or More Standards for One or More Beneficial Uses but Not Requiring the Development of a Total Maximum Daily Load

Category 4 water bodies are grouped into one of three subcategories: 4a, 4b, or 4c. Each of these subcategories is described in the following sections.

Category 4a—Total Maximum Daily Load Completed and Approved

Impaired water bodies are placed in Category 4a when a TMDL is developed by DEQ and approved by EPA such that, when implemented, full attainment of the water quality standards is expected for the specific impairment (e.g., sediment) for which the TMDL was developed. If the water body has any other impairment(s), then it may be included in other categories of the Integrated Report also.

Once the EPA has approved a TMDL, an implementation plan is developed. An implementation plan, guided by an approved TMDL, provides details of the actions needed to achieve TMDL-specified load reductions, outlines a schedule for those actions, and specifies monitoring needed to document action and progress toward meeting water quality standards. Additional information on TMDL implementation plans is on the following DEQ website:

http://www.deq.idaho.gov/tmdl-implementation-plans

The number of unique AUs currently in Category 4a is 1,260 out of 5,746 total AUs statewide. There are 20,485 miles of rivers and 148,324 acres of freshwater lakes that have an approved TMDL.

The list of Category 4a AUs can be viewed in Appendix F.

Category 4b—Waters of the State That Have Pollution Control Requirements in Place, Other Than a TMDL, and Are Expected to Meet Standards

Impaired water bodies may be placed in Category 4b when other pollution control requirements (e.g., best management practices) required by local, state, or federal authority are stringent enough to achieve applicable water quality standards (pursuant to 40 CFR 130.7(b)(1)) within a reasonable period of time. When adequate pollution control requirements are established on an impaired water body, this action obviates the need for a TMDL.

For a water body to be considered for Category 4b, the following 6 elements must be addressed in the 4b rationale:

1. Identification of stream segment and statement of problem causing the impairment
2. Description of pollution controls and demonstration of how they will achieve water quality standards
3. An estimate or projection of the time when water quality standards will be met
4. Schedule for implementing pollution controls
5. Monitoring plan for tracking effectiveness of the pollution controls
6. Commitment to revise pollution controls as necessary

Each AU listed in Category 4b will be reviewed by EPA and DEQ according to the Category 4b rationale during each integrated reporting cycle to ensure that a water body that has been placed in Category 4b is still meeting all the proposed pollution control requirements. If it is determined that circumstances have changed and the requirements of the original 4b demonstration are no longer being met, DEQ may place the water body back into Category 5.

The number of unique AUs currently listed in Category 4b is 4 out of 5,746 total AUs statewide. There are 51 miles of rivers that have alternative pollution controls in place. All 4 of these AUs are addressed in the *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).

The *Bear Valley Creek 4b Justification* and supporting documentation have been posted to the Middle Fork Salmon River subbasin assessment and TMDL web page and are also included as Appendix G.

The list of Category 4b AUs can be viewed in Appendix H.

Category 4c—Waters of the State Not Impaired by a Pollutant

Impaired water bodies are placed in Category 4c if the impairment is not caused by *a pollutant* but rather caused by *pollution*, such as flow alteration or habitat alteration. Water bodies placed in Category 4c do not require the development of a TMDL. (For additional information on the differences between pollutants and pollution, see "Pollutants" and "Pollution," page 13).

The number of unique AUs currently listed in Category 4c is 408 out of 5,746 total AUs statewide. There are 7,155 miles of rivers and 85,729 acres of freshwater lakes that are impaired by pollution but not by a pollutant.

The list of Category 4c AUs can be viewed in Appendix I.

Category 5: Waters of the State for Which a TMDL Is Needed

Impaired water bodies that do not meet applicable water quality standards for one or more beneficial uses by one or more pollutants are placed in Category 5. Category 5 is a streamlined §303(d) list that excludes waters that have an EPA-approved TMDL (Category 4a) and waters impaired by pollution (Category 4c), such as flow alteration or habitat modification. Criteria for listing a water body in Category 5 include the following:

- The water body was listed as impaired in the 2008 Integrated Report, **or**
- Tier I data indicate an impairment by a pollutant, **and**
- Application of pollution controls to sources of pollution affecting the impaired water body would restore the water body to full support status.

The number of unique AUs currently in Category 5 is 912 out of 5,746 total AUs statewide. There are 17,076 miles of rivers and 208,036 acres of freshwater lakes that are impaired and needing a TMDL.

The list of Category 5 AUs can be viewed in Appendix J.

Assessment Units Appearing in More Than One Category of the Integrated Report

In some cases, a water body segment/cause combination may show up in both Category 4 and 5 of the Integrated Report. Most occurrences of such multiple listings are for water bodies that are impaired for multiple pollutants or pollution (e.g., flow or habitat alteration). Examples include the following scenarios:

- A TMDL is approved for only a subset of the causes impairing a water body. For example, a water body is listed for sediment and temperature and only has an EPA-approved TMDL for sediment. That water body would be listed in Category 4a for sediment (EPA-approved TMDL) and Category 5 (needs TMDL) for temperature.
- A water body was put on the §303(d) list for a pollutant (e.g., temperature) and pollution (e.g., flow alteration). The water body would then be listed in Category 5 for temperature and Category 4c for flow alteration. For additional information on the policies regarding pollutants and pollution, see page 13.

Note: Because an AU can appear in multiple categories (as part of multiple AU-cause combinations), the number of AUs and mileage/acreage calculations for each of the five categories mentioned above cannot simply be combined to determine the "Total in State" summation. Some AUs and corresponding mileage/acreage totals would be counted more than once, causing erroneous results.

Relevant State Policies

DEQ relies on several key technical and policy statements in making water quality determinations, and these come together in the WBAG II (Grafe et al. 2002) (Figure 4). This document, which focuses on biology as a measure of aquatic life and water quality status, is the foundation of DEQ's ambient monitoring and assessment program.

The following technical documents support the WBAG II:

- *Idaho River Ecological Assessment Framework* (DEQ 2002a)
- *Idaho Small Stream Ecological Assessment Framewor*k (DEQ 2002b)

Both of these documents are available from the DEQ website:

http://www.deq.idaho.gov/surface-water-monitoring-assessment

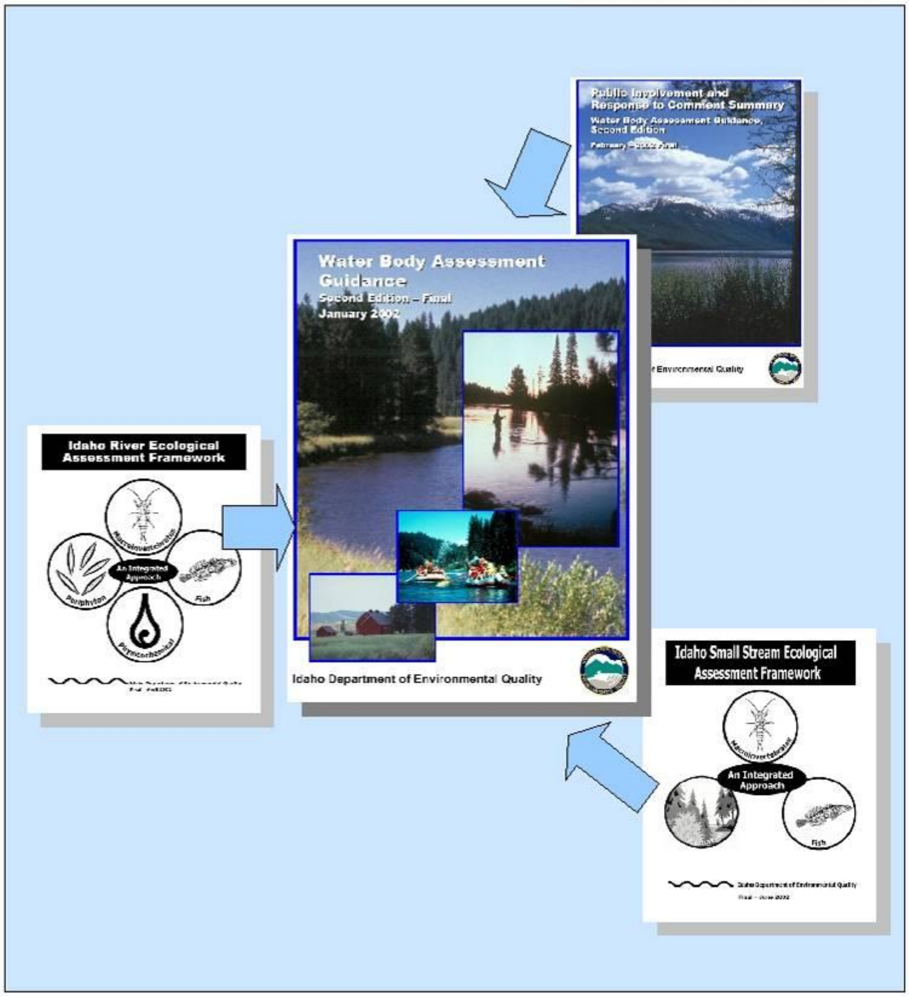

Figure 4. A number of technical documents support the WBAG II

Using these documents, DEQ has a consistent and relevant decision-making process for water-quality assessment. The WBAG II, in particular, reflects an investment of millions of dollars and thousands of hours, and DEQ has spent considerable time and effort taking and responding to public comment to make the WBAG II a better final product.

http://www.deq.idaho.gov/media/457010-wbag_02_entire.pdf

The process by which DEQ makes beneficial use support status determinations is outlined in the WBAG II. DEQ worked extensively to ensure that the public and EPA had an opportunity to review and comment on this process, considering and incorporating suggestions made by both. EPA reviewed this assessment process and provided comments in June 2001, met with DEQ to clarify those comments in July 2001, and provided comments again in September 2001. While EPA neither approves nor disapproves any state's assessment methodology, they reviewed the methodology and provided feedback prior to its use.

Excluding or Removing Waters from Category 5 of the Integrated Report (the §303(d) List)

Water bodies included in previous §303(d) lists or Category 5 of past Integrated Reports must be accounted for in subsequent Integrated Reports. However, the fact that a water body was previously included in Category 5 (or on the §303(d) list) does not necessarily mean that it must remain in Category 5 until a TMDL is established. DEQ may have new data and/or information showing that an applicable water quality standard is being met. Or based on the assessment of new data and information, DEQ may have determined that the impairment of the water body was caused by pollution and not a pollutant, therefore moving the water body from Category 5 to Category 4c. DEQ may also demonstrate that the original Category 5 listing was erroneous. The reasons for Category 5 removal that are available to choose from in ADB are listed below and have been divided into two groups (RTI 2007):

Delisting:

1. Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)
2. TMDL approved or established by EPA (4a)
3. TMDL Alternative (4b)
4. Not caused by a pollutant (4c)

Water Quality Standards Attainment:

5. Applicable water quality standards attained; original basis for listing was incorrect
6. Applicable water quality standards attained; due to restoration activities
7. Applicable water quality standards attained; due to change in water quality standards
8. Applicable water quality standards attained; according to new assessment method
9. Applicable water quality standards attained; reason for recovery unspecified

However, in order for DEQ to exclude or remove a water body from Category 5 based on the reasons mentioned above, DEQ must demonstrate *good cause* for not including water bodies (including previously listed water bodies) in Category 5 of the Integrated Report (pursuant to 40 CFR 130.7(b)(6)(iv)). Good causes include, but are not limited to, the following:

1. More recent and accurate data demonstrate that the applicable water quality standard(s) is being met.
2. More sophisticated water quality modeling demonstrates that the applicable water quality standard(s) is being met.
3. Flaws in the original analysis led to the water body being incorrectly listed.
4. Conditions have changed (e.g., new control equipment or elimination of discharges).
5. A TMDL or other pollution control requirements required by state, local, or federal authority will result in attainment of water quality standards for a specific pollutant(s) within a reasonable time.
6. Other relevant information that supports the decision not to include the AU in Category 5 of the Integrated Report.

A list of assessment unit-cause combinations that were delisted in the 2010 Integrated Report can be found in Appendix K.

Pollutants

Pollutants are defined under the CWA at Section 502(6), Idaho Code §39-3602(21), and in DEQ's water quality standards (IDAPA 58.01.02.010.78).[1] With regard to Idaho's §303(d) list, these definitions include things such as sediment, nutrients, toxics, and thermal modification—if they impair a beneficial use.

Pollution

Pollution is a very broad concept that encompasses human-caused changes in the environment that alter the functioning of natural processes and produce undesirable environmental or health effects. Pollution includes human-induced alteration of the physical, biological, chemical, and radiological integrity of water and other media.

Flow and habitat alterations are considered *pollution* and not specific *pollutants* according to EPA (§502(6) and §502(19) of the CWA and EPA 2001); hence, DEQ does not develop TMDLs for flow alteration and habitat alteration.

However, water bodies affected by these forms of pollution are not overlooked or ignored; they are identified in Category 4c of the Integrated Report. Flow and habitat alteration are often the result of, or affected by, the existence of pollutants in the water body that are suitable for TMDL calculation. For example, excess sediment may impair a use and, therefore, violate state water quality standards on a water body that may be impacted by a lack of water flow (or habitat modification). If the impairment is partly caused by excess sediment, the water body will be placed on the §303(d) list of impaired waters (Category 5 of the Integrated Report).

Assessment Units

Boundaries for all waters in the Integrated Report are based on AUs as defined in the WBAG II. Using AUs to describe water bodies offers many benefits, the primary benefit being that all the waters of the state are defined consistently, which is a fundamental requirement of §305(b) reporting. An AU is a group of similar stream segments that have similar land-use practices, ownership, or land management. Stream order, however, is the main basis for determining AUs; an AU remains the same even if ownership and land use change significantly. AUs are subsets of larger groupings defined by water body identification numbers (WBIDs), which are subsets of still larger groupings defined by hydrologic unit codes (HUCs) (Figure 5). Because AUs are extensions of WBIDs, there is a direct tie to the water quality standards for each AU so that uses defined in the standards are clearly tied to streams on the landscape. Based on fourth-field hydrologic units (8-digit

[1] This document references the most current version of the IDAPA rules (Idaho Administrative Code 2011) available at the time of publication. Rules are annually updated resulting in rule numbering changes. For the most current version of the Idaho Department of Environmental Quality's IDAPA rules, visit *http://adm.idaho.gov/adminrules/rules/idapa58/58index.htm*.

codes), Idaho has 86 HUCs, approximately 2,500 WBIDs, and 5,746 AUs. Since the 2008 Integrated Report, 523 new AUs have been added as a result of new lake AUs, AU splits, and AUs that had beneficial uses not fully supporting but no causes associated with them, which prevented them from being captured in the Integrated Report. A map of Idaho's basins and HUCs can be viewed on DEQ's website:

http://www.deq.idaho.gov/tmdls

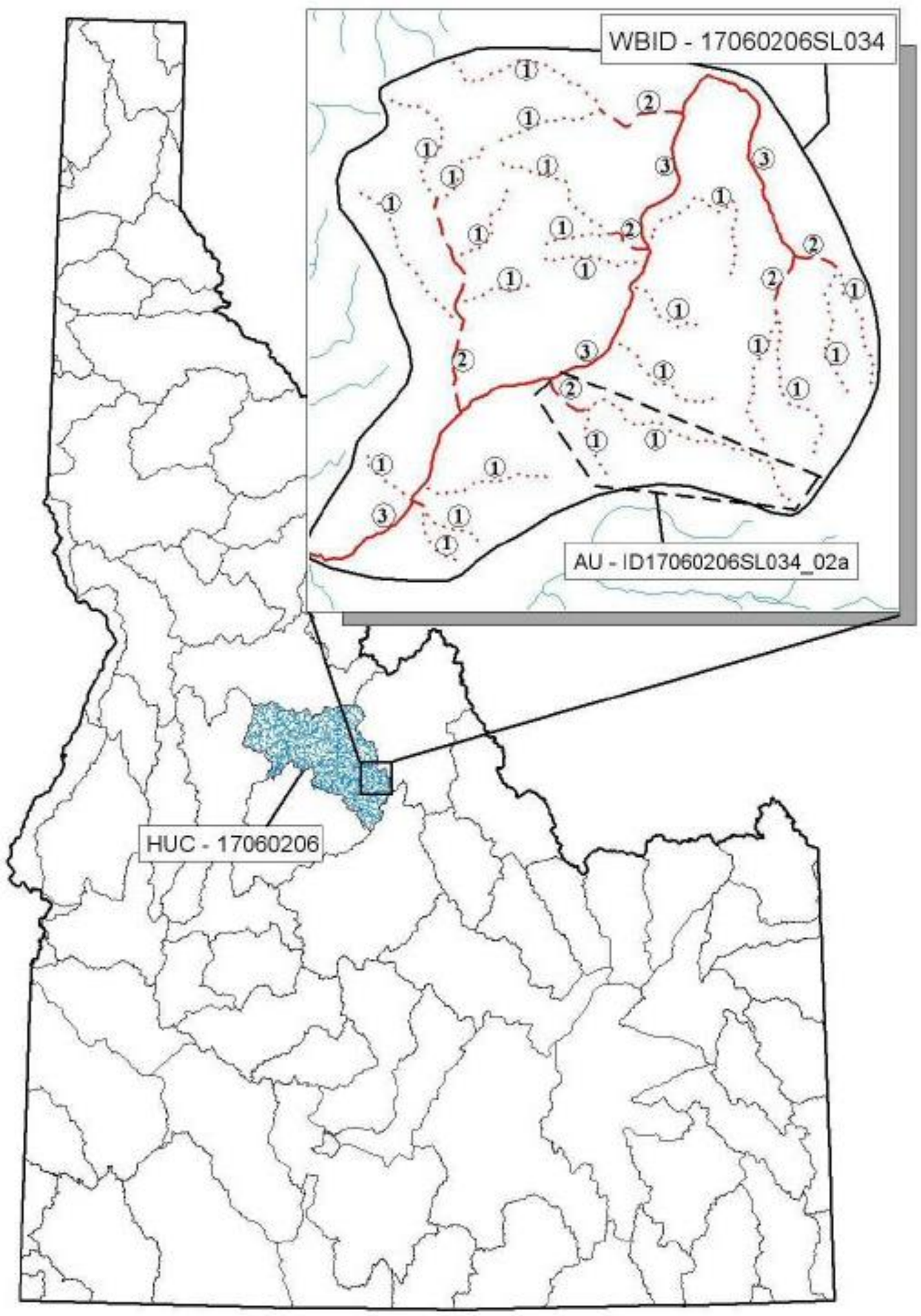

Figure 5. Relationships among hydrologic unit codes (HUCs), water body IDs (WBIDs), assessment units (AUs), and stream order

Beneficial Uses: Designated, Presumed, and Existing

Note: The two following sections—*Designated Surface Waters* and *Undesignated Surface Waters*—are excerpts taken directly from the WBAG II (Grafe et al. 2002, pp. 3-1 through 3-2) and are included here because of the importance that beneficial uses—designated, presumed, or existing—play in the assessment process. DEQ is not soliciting comment on these sections; this material has already undergone public comment and response. These sections are included here for information purposes only.

Designated Surface Waters

Surface water use designations are defined and listed in the Idaho water quality standards (WQS § 100-160). These include uses that are applied on a water body-specific basis (aquatic life, recreation, domestic water supply), and uses that are applied to all waters of the state (agricultural and industrial water supply, wildlife habitat, and aesthetics). Waters may also be designated as outstanding or special resource waters (WQS § 055, 056); however, these two designations are not covered in this guidance.

Water bodies with specific use designations are listed in tables in WQS § 110-160 following the Idaho WBID... Unless broken out separately in the tables, use designations listed in the tables as the standards for a WBID unit apply to all perennial segments of waters included within that particular WBID unit. Usually these are tributaries, but in a few cases include nearby disconnected waters, since the WBID system has to encompass all waters in the state. For example, Cottonwood Creek, WBID 17040212-14, is designated for cold water and secondary contact recreation uses. This designation also includes subordinate streams within that WBID unit as shown in Table 3-1.

Table 3-1. Subordinate Streams within WBID 17040212-14

WBID #	WBID Name	Included Waters	Perennial portions also become designated as:
14	Cottonwood Creek	Burnt Creek	COLD SCR[1]
		Cottonwood Creek	COLD SCR
		Dry Cottonwood Creek	COLD SCR
		North Cottonwood Creek	COLD SCR
		Williams Reservoir	COLD SCR

[1] COLD = cold water;
SCR = secondary contact recreation

If, for example, North Cottonwood Creek also had unnamed tributaries, then the cold water and secondary contact recreation designations would apply to those perennial portions of the unnamed tributaries as well.

The distinction that, unless otherwise designated, the use designations of a WBID unit only apply to perennial portions of waters in the WBID is necessary because of the inclusive manner in which WBIDs are defined. Somewhere in the continuum of stream channels from rivers to rills, there is a point above which a rivulet is so small that it cannot provide an aquatic habitat that can support a biological community with composition and function similar to reference conditions. All of the aquatic life uses presume fully established biological communities, which in turn presume a persistent aquatic environment. Temporary waters (e.g., intermittent streams, vernal pools) may have important ecological functions but cannot attain the same biological communities as perennial waters.

Undesignated Surface Waters

Waters listed in WQS § 110-160 for which uses have not yet been designated or which have incomplete use designations are considered undesignated waters for those uses. Two concepts that are important for determining which beneficial uses are to be protected, and thus assessed on undesignated waters, are addressed in the Idaho WQS: presumed uses and existing uses.

Presumed Uses

DEQ presumes that most waters in Idaho will support cold water aquatic life and, depending on the characteristics of the water body, primary or secondary contact recreation (IDAPA 58.01.02.101.01a). "Support" of a beneficial use is defined in IDAPA 58.01.02.010.40. Cold water aquatic life use support determination procedures, including numeric criteria and recreation criteria, apply to undesignated, perennial waters to protect these presumptive uses. If an undesignated surface water body is intermittent (i.e., has zero flow at some time during most years), then aquatic community indexes cannot be applied; however, numeric criteria do apply to intermittent waters during periods of "optimal" flow (IDAPA 58.01.02.010.51 and 070.06).

Existing Uses

Existing beneficial uses of the waters of the state are to be protected, even if not designated (IDAPA 58.01.02.050.02b). "Existing" is defined as being more recent than 1975, if the use no longer can be documented to occur. For the purpose of determining whether a water body fully supports designated and existing beneficial uses per IDAPA 58.01.02.054, aquatic life beneficial uses may be assumed to exist as described in section 3.2.2 of the WBAG II (Grafe et al. 2002, p. 3-3). These initial determinations of existing aquatic life uses are needed to complete water body assessments and to assemble a §303(d) list. Actual subsequent use designations may be different, depending upon additional information that may be received following the procedures described in Idaho Code 39-3604 and IDAPA 58.01.02.101.01.

Data Quality

Data are the foundation of DEQ's assessment process. Although the WBAG II was primarily designed to use data obtained by DEQ through the Beneficial Use Reconnaissance Program (BURP), DEQ also considers data from other existing and readily available sources. Such data may be from other agencies, institutions, commercial interests, interest groups, or individuals, and it may relate to the existence, support status, or associated criteria for the beneficial uses in a water body. These external data sources are ranked for quality according to three tiers (Table 1).

Existing and Readily Available Data

DEQ pursues several avenues for notifying the public of its intent to seek water quality–related data and information from external partners, including disseminating a news release to media statewide, posting announcements to DEQ's website, and direct mailing notices to interested individuals and organizations, such as the Idaho Department of Fish and Game, the USFS, and the Bureau of Land Management. DEQ conducted a 60-day call for data from July 13 through September 11, 2009. A cut-off date for data submission is necessary to allow the data to be received, analyzed, and assessed for timely completion of the Integrated Report. Data collected or submitted after the respective deadline may be considered for subsequent §303(d) lists and/or other water quality assessments conducted by DEQ.

Table 1. Data tier comparison

Tier	Scientific Rigor	Relevance	Example	How Used
I	• Quantitative. • Parameters measured. • Established monitoring plan with QA and defined protocols. • >30 hours of supervised training. • Samples processed in EPA-certified lab following standard methods or by professional taxonomist. • Organisms identified by a professional taxonomist.	• Data relates to either water quality standard(s), especially numeric, or a beneficial use. • ≤5 years old. • Data relates to a named water body (GIS, latitude and longitude or map location provided).	• Ph.D. or masters thesis. • Published or printed studies or reports. • Published predictive models. • EPA EMAP. • BURP data. • Use attainability analyses. • Rapid Bioassessment Protocols (RBP).	• 303(d) listing or de-listing. • 305(b) reports • subbasin assessments. • TMDLs. • Planning for future monitoring.
II	• Qualitative or semi-quantitative in nature. • May have a monitoring plan. • No QA/QC provided for within plan. • Protocols may or may not be defined. • Parameters rated. • Field staff may not be trained: Lab may not be certified. • Taxonomist may not be a professional.	• Data may relate to a watershed. • Not water body specific. • Data >5 years old. • Data may relate to other agency guidelines or objectives.	• Environmental assessments. • Proper Functioning Condition. • Cumulative Watershed Effects. • Most citizen monitoring. • Models with documentation. • Agency planning documents.	• 305(b) reports. • Subbasin assessments or TMDLs when data adds to overall assessment quality. • Planning for future monitoring.
III	• May be qualitative in nature. • Parameters evaluated. • Field staff have little to no training. • No documented monitoring plan. • No QA/QC. • Anecdotal in nature.	• Not specific to water quality standards or beneficial uses. • Location not specific. • Data ≥10 years old.	• Non-specific reports or studies. • Newspaper articles. • Simple models without any documentation.	• Planning for future monitoring. • Hold for further investigations.

Source: (Grafe et al. 2002, p. 4-6)

Note: The following subsections on data quality—*Tier I, Tier II*, and *Tier III*—are taken directly from Section 4 of the WBAG II (Grafe et al. 2002, pp. 4-7 through 4-9) and are intended for context and information only.

Tier I

The scientific rigor of Tier I data is characterized as high and typically includes monitored data collected by professional scientists or professionally trained technicians with more than 30 hours of supervised training. The data are collected and analyzed under a monitoring plan with quality assurance and parameters measured. Samples are processed in an EPA-certified lab following standard methods or by a professional taxonomist. Biological data may come from one of several different assemblages, such as macroinvertebrates, fish, or algae, and are identified by a professional taxonomist. Physical habitat data may have quantitative measurements and standardized qualitative assessment procedures.

To be considered relevant, Tier I data usually include direct measurements or observations of beneficial uses, criteria, or causes of impairment. In addition, the sampling needs to be representative, that is, 1) to have been conducted at multiple times and locations or 2) at a representative location with specific locations identified on a map or with GIS. The information must be less than five years old and must be able to be differentiated along a gradient of environmental conditions (EPA 1998 [*EPA National Water Quality Inventory 1998 Report to Congress*.EPA-841-R-00-001.]). Predictive models must include calibration factors and, as noted below, are not used exclusively to make beneficial use determinations.

Examples of the types of monitoring data typically meeting Tier I criteria include BURP, EPA Environmental Management and Assessment Program (EMAP), Rapid Bioassessment Protocols, Use Attainability Analyses, graduate theses, and professionally prepared and peer-reviewed studies, reports, or predictive models. These data can come from a number of possible sources such as state and federal agencies, academic institutions, local governments, or private parties. Tier I data are of sufficient quality and relevance to be used for 303(d) listing and de-listing decisions, 305(b) reports, subbasin assessments, and TMDL development. Data must meet both scientific rigor and relevance of Tier I criteria to be classified at the Tier I level.

Tier II

DEQ characterizes the scientific rigor of Tier II data as qualitative or semi-quantitative data. The data collectors will have followed documented field, laboratory, and data-handling protocols, have rated parameters, and may have a monitoring plan. The monitoring plan may not provide quality assurance (QA) or quality control (QC) information. Tier II data include professionally conducted evaluations and habitat data consisting primarily of standardized visual assessments or evaluations. However, some field staff may not be trained, the evaluating laboratory may not be certified, or a professional taxonomist may not identify the samples. Relevant Tier II data may include evaluations based on monitored or evaluated data more than five years old, watershed land use information, modeling results with estimated inputs, or measurement of an atypical event (EPA 1998). Data may relate to a watershed rather than be water body specific. They may also relate to guidelines or objectives of other government entities.

Data collected for Environmental Assessments, Proper Functioning Condition (PFC) assessments, Cumulative Watershed Effects (CWE) Process, and agency planning documents, as well as Citizen Volunteer Monitoring data, are examples of types of data that would be considered Tier II. Tier II data are not used in 303(d) listing decisions due to higher data requirements for impairment decisions under Section 303 (see Section 1.4.1). However, Tier II data may be used in subbasin assessments and TMDLs when the assessor has the time to consider these data in context with other collected information. These data can also be used to establish beneficial uses for assessments and in 305(b) reports.

Tier III

The scientific rigor of Tier III data often includes information collected by unknown or untrained individuals. The data may not have been collected or analyzed following standard or reported protocols. Data without any originating documentation also appears in this category. Relevance of data is limited due to information having no intrinsic judgment or known reference for comparison. The data may have been extrapolated based on other sites, or a reflection of a specific localized condition not representative of the water body. This type of information may be considered as general background information, but it is not of sufficient rigor and relevance for listing decisions or regulatory actions.

Tier III data are not used in 303(d) decisions, subbasin assessments, TMDLs, or 305(b) reports due to the uncertainty in the scientific rigor in their collection and relevance to beneficial uses or water quality standards. This data may be used in helping DEQ target future planning and monitoring.

Temperature Compliance

Applying the 10% Exceedance Policy

DEQ uses weight of evidence in assessing impairment due to pH, dissolved oxygen, temperature, and turbidity (IDAPA 58.01.02.054.03). This policy allows deference to biological health in judging whether a water supports a cold water aquatic life use, but only when exceedance of numeric temperature criteria is infrequent (less than 10%), brief (2 hours or less), and small (conditions that avoid acute effects) and aquatic habitat and biological data indicate that aquatic life beneficial uses are otherwise supported. This policy applies to §303(d) listing and delisting decisions only and is not for determining compliance with the water quality standards for other purposes. While it is always necessary to target the current water quality criteria when a TMDL is developed, if the frequency of the temperature criteria exceedance is less than 10% and there is no biological evidence of thermal impairment, then it is possible to propose delisting.

If a temperature TMDL has been established, then the water may be reassessed during TMDL implementation. In that reassessment, the standard for temperature would be considered met if the frequency of criteria exceedances falls below 10%, taking into account the influence of air temperature on water (IDAPA 58.01.02.80.03).

Frequency of temperature exceedances must be calculated based on the metric used to formulate the criteria (e.g., the frequency of daily maximum stream temperatures exceeding daily maximum criteria, see "Metric Definitions" section below). Except for single daily maximum criteria, this calculation requires data processing of the raw temperature record before counting exceedances. The following sections provide detail on how criteria exceedance frequencies are calculated for water temperature, paying heed to periods of time when they apply and to situations in which compliance with standards may be inferred when the data record does not cover the entire time period of interest.

Time Periods of Interest

For cold water aquatic life, the summer period of June 21 through September 21 is the time period of interest to gauge frequency of temperature exceedances. This 93-day period is when the natural progression of seasons causes water temperatures to peak, which typically occurs between July 15 and August 15, with progressively cooler temperatures generally occurring on either side of this peak.

For salmonid spawning, there is no fixed time period; appropriate spawning periods are site-specific and should be determined on a case-by-case basis. The time period of interest is the entire spawning and incubation period at a given site. This period of interest cannot be less than 45 days, which is set as a minimum to allow two weeks for spawning and an additional month for egg incubation. The frequency of exceedance of salmonid spawning criteria should be based on the entire spawning and incubation period at the site in question. For assessment purposes, the information used to determine when spawning occurs should be documented in ADB.

Critical Time Periods

Within the above time periods of interest, a narrower critical period can be identified during which maximum temperatures typically occur. Absent data to the contrary, critical periods for water temperature are defined as follows:

- For *cold water aquatic life,* the critical period is from July 15 through August 15. This is when most streams reach their highest temperature of the year.
- Spawning usually takes place when water temperatures are in a spring or fall transition; thus, temperatures are either warming or cooling over the spawning period. Therefore, for *salmonid spawning,* the critical period is the 22 days at the warmer end of the spawning period. For spring spawners, these days will be at the chronological end of the period; for fall spawners, it will be at the chronological beginning of the period.

Complete Data Records

To calculate and evaluate the percentage of days when temperature criteria are exceeded, an adequate data record is needed. The best situation is to have a complete data record—one that covers the entire period of interest as defined above. However, this is not always possible, even when planned. Furthermore, much historical data was collected before this policy was in place. While collecting a complete data record for the entire period of interest should be the goal of future monitoring efforts, the following discussion describes allowances that can be made for evaluating partial data records.

Partial Data Records

Partial data records do not include the entire time period of interest. Data may be missing at either end due to either delayed deployment or early retrieval of temperature data loggers. Data gaps may exist in the middle of the record due to the sensor malfunctioning or coming out of the water. Only partial data records that include the critical periods defined above can be used for determining whether frequency of exceedance is less than 10%. A partial data record that does not include the entire critical time period cannot be used to determine whether an AU is **in compliance** with Idaho's temperature criteria.

Showing Non-Compliance

A partial data record that does not include the critical time period may be sufficient to estimate a frequency of exceedance that is at least 10% and thus determine **non-compliance** with the standards. This situation occurs when the observed number of days that exceed the criteria in the partial record is greater than the number of days that equal 10% exceedance for the entire period of interest.

For example, if for salmonid spawning a partial data record includes only 41 days of a 90-day spawning period, but 15 of those days have temperatures above the criterion, then the frequency of exceedance is at least 15/90, or 17%. Regardless of the missing 49 days of data, it can be said with confidence that the temperature standard has not been met. For cold water aquatic life, a frequency of exceedance of 10% or more could be determined with just 10 days of data showing temperature above the criterion, even if those are the only 10 days with data available (10/93 = 11%).

Data records of less than 10 days for cold water aquatic life, or less than 10% of the applicable spawning period, are inadequate to show a frequency of exceedance that is 10% or more and are therefore inadequate to determine non-compliance with temperature standards.

Inferring Compliance When Partial Data Shows Less Than 10% of Days Above Criteria

If the partial data record includes the entire critical time period, it may be possible to reasonably infer that the frequency of exceedance is less than 10%, and thus, water temperature is in compliance with the water quality standards.

For *cold water aquatic life*, if the partial data record includes the critical period of July 15 through August 15, inclusive, and the frequency of exceedance is less than 10%, then it can be reasonably assumed that the frequency of exceedance for the entire summer period of interest is less than 10%.

Similarly, if the data record during *salmonid spawning* includes the warmest 22 days of the spawning period (end or beginning of the period, depending on whether spawning extends into spring or fall) and the frequency of exceedance is less than 10%, then it can be reasonably assumed that the frequency of exceedance is less than 10% for the entire spawning period.

This inference is based on the reasonable assumption that the frequency with which criteria are exceeded outside the critical time period is less than the frequency of exceedances observed during the critical period when temperature are typically the warmest.

Inferring Compliance When Partial Data Shows More Than 10% of Days Above Criteria

Even when the calculated frequency of exceedance is greater than 10% for a partial data record, it may still be possible to infer a frequency of exceedance that is less than 10% for the entire period of interest. To do so, one must carefully examine the data record while considering seasonal trends in temperature.

For salmonid spawning, if the last (or first) 7 consecutive days at the cool end of the data record show no exceedances of criteria, then it is reasonable to project that the entire following (preceding) unmonitored portion of the period of interest (i.e., the days for which there is no data), is also without exceedances. In this case, an inferred frequency of exceedance may be calculated using the entire spawning period as the denominator.

For example, let the period of interest for spawning be May 1 through June 30. Furthermore, let us say the available data record runs from June 1 through June 30 and shows 5 exceedances of the 13 °C daily maximum temperature criterion. The calculated frequency of exceedance based on the number of monitored days (days for which data exist) is 5/30, or 17%. However, closer examination of the data record reveals that all 5 exceedances occurred after June 15, with no exceedances during the first 7 days of June at the cooler portion of the monitoring record. Therefore, it can be reasonably assumed that had data been obtained for May, they would also show no exceedances of the criterion. The inferred frequency of exceedance for the entire spawning period would thus be 5/61, or 8%—showing compliance with the standard.

The inference for salmonid spawning in this hypothetical case is based on the relatively rapid rise (or fall) in temperature through spring and fall and the reasonable assumption that for a partial data record that includes the critical time period, an absence of criteria exceedances in the 7 days at the cooler end of the monitored period is indicative of no exceedances earlier (or later) when temperatures are expected to be even cooler.

Similar inference might be made regarding compliance with the cold water aquatic life standard if observed exceedances of the criterion were restricted to the middle of the critical time period with no exceedances from July 15 through July 21 and from August 9 through August 15. Given that the peak of the seasonal cycle in temperature is typically flatter than the rise and drop before and after the peak, this is unlikely to ever be the case.

Metric Definitions

Water temperatures and water quality criteria are expressed using several metrics. These metrics reduce a complex, continuously variable record to a single value. The following are the four most common water temperature metrics:

- *MDMT—Maximum Daily Maximum Temperature*. Of all the daily maximum temperatures recorded at a site during a monitoring period, this is the highest. This is the metric for Idaho's cold water biota criterion of 22 °C and for Idaho's salmonid spawning criterion of 13 °C. In the case of the salmonid spawning criterion, the applicable period is when spawning is known to occur, which may be less than the entire monitoring period.
- *MDAT—Maximum Daily Average Temperature*. Of all the daily average temperatures calculated for a site during a monitoring period, this is the highest. This is the metric for Idaho's cold water criterion of 19 °C, and for Idaho's salmonid spawning criterion of 9 °C.
- *MWMT—Maximum Weekly Maximum Temperature*. Of all the weekly (7-day) averages of daily maximum temperatures calculated for a site during a monitoring period, this is the highest (i.e., the peak in the 7-day running mean of daily maximum temperatures during the monitoring period). This is the metric for Idaho's juvenile bull trout rearing criterion of 13 °C and of EPA's juvenile bull trout rearing criterion of 10 °C. Idaho's criterion applies June through August; EPA's criterion applies June through September.
- *MWAT—Maximum Weekly Average Temperature*. Of all the weekly (7-day) averages of daily average temperatures calculated for the monitoring site, this is the highest (i.e., the peak in the 7-day running mean of daily average temperatures during the monitoring period). This metric is not currently used in Idaho's water quality standards but is the metric for EPA Region 10's recommended juvenile salmonid rearing criterion of 15 °C.

These definitions are important, as different amounts of data are needed in order to calculate the different metrics. As a matter of policy, these differences are handled as explained below.

Three Types of Temperature Data

Water temperature data can be collected by dipping a thermometer (mercury, alcohol, or digital) into a stream, producing a single measurement. Such measurements are referred to as *ad hoc* measurements. The usefulness of these measurements is very limited; since only one measurement is usually obtained, such data could only be used for evaluating MDMT. While *ad hoc* measurements can be done repeatedly over the course of a day, in practice, *ad hoc* measurements usually yield one value per day.

Often *ad hoc* temperature readings are obtained for reasons other than evaluation of water temperature criteria (e.g., to fulfill electrofishing permit requirements) and may be taken without due regard for representativeness, influences of direct sunshine, or a calibration check. Most water temperature measurements taken as part of Idaho's BURP monitoring are *ad hoc* measurements.

Current and recent water temperature monitoring more commonly uses digital recording thermometers (often called data or temperature loggers, although these instruments may also record other data) to produce a continuous temperature record for a given time interval. These devices do not produce a truly continuous record but rather store a history of regularly spaced measurements that can be conveniently downloaded to a computer. With enough valid measurements per day, these records can be used to calculate all of the metrics defined above and more.

Older analog recording devices were used for a time and produced *truly* continuous records of temperature as a chart on a piece of paper. This data requires much greater effort to process into the metrics listed above since it involves reading the chart and transcribing a record manually. However, the end result is a record much like that of digital recording thermometers. In this report, both digital and analog measurements will be referred to as *continuous* measurements.

Far less commonly, water temperatures are collected by a maximum/minimum thermometer that "remembers" only the highest and lowest temperature in the period between readings. If read regularly (e.g., at the same time each day), these can provide useful information. These will be referred to as *max/min* measurements.

Data Required To Calculate Metrics

To calculate each of the temperature metrics defined above, the data identified in Table 2 are needed.

Table 2. Data required to calculate temperature metrics

Maximum Daily Maximum Temperature (MDMT)	A single measurement greater than the applicable MDMT criterion, whether obtained by *ad hoc*, *max/min*, or *continuous* measurement is sufficient to document an exceedance of this criterion. However, any MDMT exceedance will be judged according to the following limitations: • A daily maximum is the highest temperature in a day, thus it only requires one measurement taken at the right time; however, it usually is not known when water temperature peaks unless continuous measurements are available. The likelihood of a continuous record actually capturing the maximum temperature (alternatively, the difference between the true maximum and the measured maximum) depends on how fast the temperature changes during a day and how often measurements are taken. Nonetheless, if a single measurement exceeds the MDMT limit, even if it is not known for sure that the recorded temperature is the true daily maximum, it is known that the daily maximum is no less than that single measurement and therefore the criterion is exceeded. • Because of concerns with regard to the data representation, accuracy, and precision of *ad hoc* temperature measurements obtained with an alcohol or mercury thermometer, a single measurement of this type will not be sufficient for judging compliance with instantaneous criteria (e.g., MDMT). Thus, Idaho will not use single BURP water temperature measurements by themselves to judge violations of water quality standards. • If two or more measurements of temperature are independent and agree with one another, the chance that they represent an error is greatly reduced. Thus, single measurements may be corroborated by other independent temperature data. Two or more *ad hoc* measurements from the same location, on different days, showing exceedance will be sufficient corroborating evidence, as will additional data of a different type (e.g., *continuous* or *max/min*). • Multiple *ad hoc*, *max/min*, *continuous* measurements, or a combination thereof from the same stream reach can be combined and subjected to the 10% exceedance policy to judge non-compliance with water quality standards. (See WBAG II Section 5-2 and Attachment A, [Grafe et al. 2002]).
Maximum Daily Average Temperature (MDAT)	To calculate a daily average, a minimum and maximum in the same day are required. However, Idaho's bull trout standard specifically requires 6 evenly spaced measurements in a 24-hour period. DEQ applies that same requirement to all metrics that are based on daily averages (i.e., both MDAT and MWAT, which is made up of 7 consecutive daily averages). After the temperature record is reduced to metrics, the metrics are subject to the 10% exceedance policy to judge compliance with water quality standards.
Maximum Weekly Maximum Temperature (MWMT) and Maximum Weekly Average Temperature (MWAT)	Weekly (or 7-day average) metrics require a minimum of 7 consecutive daily maximums (for MWMT) or daily averages (MWAT), each subject to the same limitations set out above. Frequency of exceedance for these compound metrics is based on the final calculated metric, not a frequency of exceedance of component metrics (i.e., one MWMT greater than the criterion does not require nor imply seven daily maximums above criteria).

Intermittent Waters

Intermittent waters naturally occur throughout Idaho; some 42,775 miles of streams are identified as such by the U.S. Geological Survey in its National Hydrography Dataset (NHD). According to Idaho's water quality standards, if a surface water body is intermittent (i.e., has zero flow for at least 1 week during most years), then numeric criteria apply only during periods of "optimal" flow (IDAPA 58.01.02.010.51 and 070.06).

DEQ does not believe its current assessment indices are appropriate for the bioassessment of intermittent waters. DEQ also does not have a specific process for monitoring or assessing intermittent waters. A large portion of these waters are unassessed and are therefore listed in Category 3 of the Integrated Report. Of the 2,102 AUs that are currently in Category 3, 240 have been visited or evaluated and determined to have zero flow. Due to insufficient available data and information, DEQ is unable to provide a designated use attainment determination. Therefore, these AUs will remain in Category 3 until such time that an assessment protocol for intermittent waters is developed to collect sufficient data. Refer to Appendix L for the list of AUs that have been determined to have zero flow.

Springs and Lake Outlets

Assessment of springs and lake outlets are addressed on a case-by-case basis at the discretion of the assessor. Generally, springs and lake outlets differ biologically from free-flowing streams and therefore require a unique assessment tool. Multimetric macroinvertebrate indexes, such as the stream macroinvertebrate index (SMI), are not suitable for use in these atypical natural stream types. Macroinvertebrate communities from spring-fed streams and lake outlets may have very low natural diversities and would receive very low index scores, even under pristine conditions (see Maret et al. 2001; Maret et al. 1997; and Anderson and Anderson 1995 reviewed in Mebane 2001).

Wetlands

DEQ does not have a process for assessing the beneficial uses or determining if water quality standards are met in wetland settings. While wetlands are protected by the CWA, DEQ has no way to assess these areas for the 2010 Integrated Report.

Tribal Waters

Waters in the 2008 Integrated Report or the 2010 Integrated Report may be wholly within Indian reservations, on lands held by tribal members subject to a restriction on alienation, and/or held by the United States in trust for Indian tribes. DEQ's actions with respect to the Integrated Report and such waters do not constitute a determination, waiver, admission, or statement on the part of the State of Idaho with respect to jurisdiction over such waters or the boundaries of any tribal reservation.

Based on comments DEQ received from tribes regarding the 2002 Integrated Report and, more recently, comments from the tribes and EPA on the 2008 Integrated Report, DEQ is proposing to split AUs at the EPA-recognized reservation boundaries. In so doing, no monitoring sites or assessment determinations will be shown within the reservations. However, assessment determinations based on BURP or other monitoring data that may have been collected on a reservation will still be used to support beneficial use determinations for waters adjacent to the reservation boundaries. Figure 6 illustrates how waters on tribal reservations currently appear (colors indicate beneficial use status) in the Integrated Report, and Figure 7 illustrates how the same waters would appear once the proposed policy is implemented. Refer to Appendix M for a list of waters that are within a reservation and will be affected by this policy. This proposal will not be fully implemented until the 2012 Integrated Report. Splitting the AUs as described above does not constitute a determination, waiver, admission, or statement by the State of Idaho regarding the boundaries of any tribal reservation.

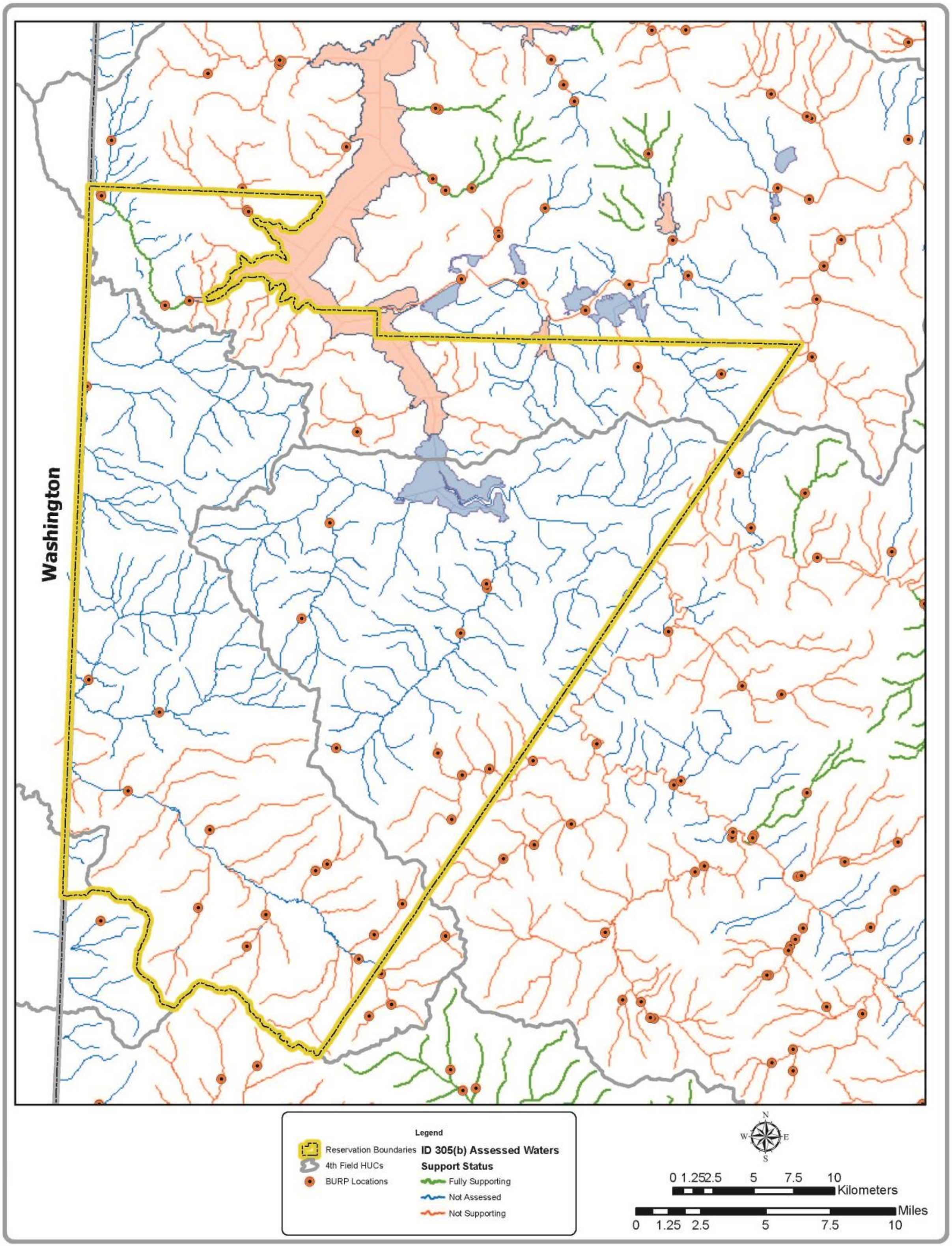

Figure 6. Example of how waters on tribal reservations currently appear in the Integrated Report

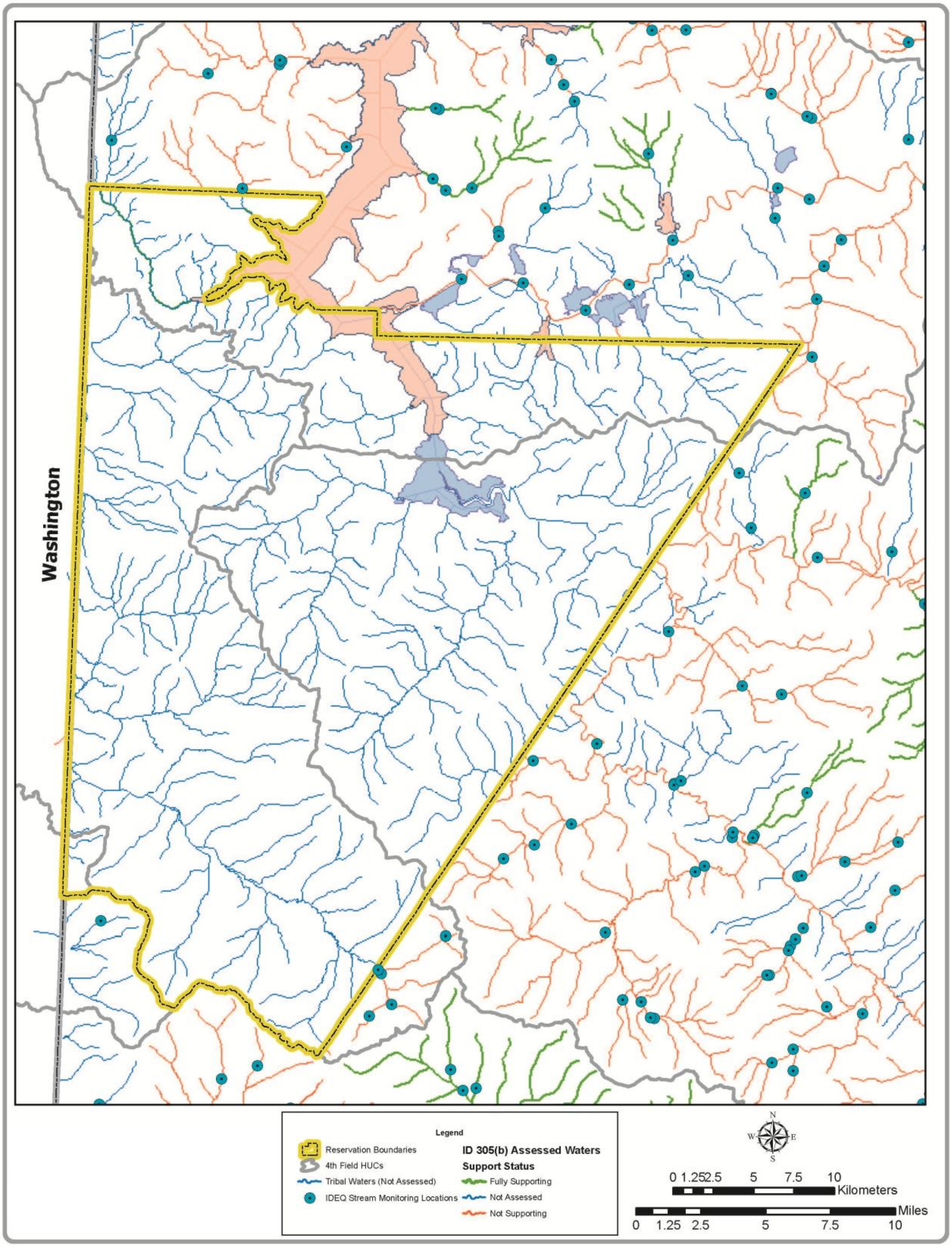

Figure 7. Example of how waters on reservations would appear in the 2012 Integrated Report after the proposed splits

Prioritization and Total Maximum Daily Load Schedule

DEQ is working under a settlement agreement (DEQ 2002c) that established a schedule through 2007 for the development of TMDLs based on HUC, AU, and pollutant. DEQ considered the severity of pollution and the uses to be made of such waters when developing and prioritizing the schedule. Those TMDLs still remaining from the settlement agreement have been given *high priority*. Refer to Appendix N for those waters still remaining on the settlement agreement.

HUCs due for a 5-year review are also deemed *high priority* and can be found in Appendix O. This appendix also includes those waters that were not subject to the settlement agreement or due for a 5-year review but are due for a TMDL. These waters were assigned *medium* or *low priority* based on multiple factors, including when the AU-pollutant was first listed in Category 5, severity of concern, pollutant, complexity of analysis, and availability of resources.

Any AU-pollutant combination added during the 2010 cycle will be considered low priority for purposes of TMDL development. These waters will be re-evaluated for priority ranking in the 2012 Integrated Report.

Schedule Modification

Schedule modifications are done on a case-by-case basis. DEQ reserves the right to re-prioritize individual AUs or HUCs based on severity of pollution, funding, personnel availability, and executive or legislative direction.

Designated Wilderness and Inventoried Roadless Areas

Waters in Category 1 of the Integrated Report are those AUs that fall entirely within a designated wilderness or inventoried roadless area where water quality standards are presumed to be attained for all beneficial uses.

These waters best exemplify DEQ's "natural background condition" water quality standard (IDAPA 58.01.02.054.04). Waters in this condition exhibit no measurable change in "the physical, chemical, biological, or radiological conditions existing in a water body without human sources of pollution within the watershed" (IDAPA 58.01.02.010.61).

DEQ believes waters within designated wilderness and inventoried roadless areas meet the intent for establishing natural background conditions by virtue of the fact there has been little to no significant human management to cause changes in water quality or affect beneficial uses. When Congress designates an area as wilderness, the main reason is because it meets the criteria of low human impact.

For roadless areas, DEQ used the two most restrictive categories: 1) those areas recommended for wilderness designation in a USFS forest plan and where road building is prohibited (1-B1 USFS designation) and 2) those areas not recommended for wilderness designation in a forest plan but where road building is still prohibited (1-B USFS designation). Waters wholly within these designated roadless areas are placed in Category 1 of the Integrated Report. In areas designated as 1-C by the USFS, road building is not prohibited; waters within these areas are not designated as roadless and therefore are not listed in Category 1 of the Integrated Report.

DEQ does not apply this wilderness/roadless policy to previously listed waters; thus, there are no delistings associated with this policy, and the policy only applies to waters that DEQ has not yet assessed ("no data" waters) or has assessed as fully supporting and within areas that fall under the roadless/wilderness definition given above.

Further, the policy only applies to AUs that are fully (100%) within a wilderness area or one of the top two categories of roadless areas (1-B1 or 1-B), eliminating waters that briefly flow through wilderness or roadless areas.

Most of these AUs are found in the Selway-Bitterroot and Frank Church River of No Return Wildernesses.

Waters to be Delisted Based on Natural Background

This section further defines the process by which AUs can be removed from Category 5 of the Integrated Report, based on application of the natural background conditions provision for temperature exceedances in the water quality standards (IDAPA 58.01.02.054.04).

According to *Concepts and Recommendations for Using the "Natural Conditions" Provisions of the Idaho Water Quality Standards* (DEQ 2003), stream water temperatures may be presumed to be natural if the following conditions exist:

For Rangeland-Dominated Assessment Units

1. No riparian roads are present and few road crossings exist; and
2. No water withdrawals are present; and
3. No signs are apparent of human-caused, accelerated erosion such as gullies, downcut stream channels, laid back banks, and
4. No riparian livestock grazing has occurred in the last 10-years; or
5. If riparian livestock grazing is allowed to occur, <10% of the streambanks have been altered, and
6. Stubble height or other benchmarks of healthy riparian vegetation do not indicate grazing over-utilization.

(DEQ 2003, p. 25)

For Forestland-Dominated Assessment Units

1. No forest harvest impinges riparian areas; and
2. No riparian roads are present and few road crossing exist; and
3. No evidence of sources of sediment delivery that are associated with human disturbance such as gullies originating from culverts, mass failures associated with road fills or timber cuts; and
4. No water withdrawals are present.

(DEQ 2003, p. 20)

If an AU meets these conditions for its dominant land type, then it will not be placed in Category 5 of the Integrated Report for temperature. At this time, DEQ is not proposing any delistings based on the natural background conditions provision for temperature.

Methylmercury Fish Tissue Criterion and Fish Consumption Advisories—When Do We List?

Human Health

Idaho's methylmercury (MeHg) fish tissue criterion is in place to protect human health. While it is not specifically meant to protect aquatic life, aquatic life is likely to be protected as well. This criterion applies to waters in Idaho that have been designated for (or are presumed to support) recreation, which are all the waters in Idaho. The value of 0.3 milligrams (mg) methylmercury per kilogram (kg) of fish tissue (wet weight) is set at a level to protect the general public from adverse effects during a lifetime of exposure. Because fish greatly bioaccumulate methylmercury, almost all human mercury exposure comes from eating fish, rather than ingesting water. Through what is called a relative source contribution, the criterion may also take into account that some exposure comes from sources other than catching and eating fish, such as eating store-bought fish. When levels of methylmercury in fish tissue from any water body exceed the criterion, there is the potential for lifetime exposure above what is considered safe, and the water will be listed as impaired for recreational use. Because the route of exposure is mostly through eating fish, secondary contact recreation is the impaired use when this human health criterion is exceeded. Because methylmercury is formed in situ from inorganic mercury, the cause will be listed as simply mercury.

Aquatic Life

Bio-magnification of methylmercury is typically on the order of hundreds of thousands-fold, meaning that methylmercury concentrations in fish tissue are many times higher than inorganic mercury levels in the water.[2] Because of this, many waters that have levels of inorganic mercury that do meet EPA's recommended chronic criterion for protecting aquatic life (which is not an Idaho standard) will have fish with methylmercury levels that do not meet the human health criterion. However, the vast majority of waters that meet the methylmercury human health criterion will also have inorganic mercury levels below EPA's recommended aquatic life criteria. Thus, Idaho believes the methylmercury human health criterion also protects aquatic life. Since Idaho has no mercury criterion specific to aquatic life, for §303(d) listing purposes, if the human health criterion is exceeded, aquatic life use will be assumed to be impaired along with secondary contact recreation.

[2] For example, EPA's estimated national median bioaccumulation factor for trophic level 3 fish (BAF_3) is 250,000 liters/kilogram. With this BAF, fish with 0.3 milligrams/kilogram of MeHg would result from water with only 1.2 **nano**grams of MeHg per liter of water.

The Methylmercury Fish Tissue Criterion and Fish Consumption Advisories

Fish consumption advisories for mercury and Idaho's human health criterion are both based on the same reference dose (RfD) of mercury. To translate the RfD to a fish tissue concentration, one must take into account the relative source contribution; the quantity of fish consumed over time, usually expressed as average grams per day; the average weight of the people eating the fish; and the differing mercury levels in various kinds of fish that may be eaten. Idaho's human health criterion, based on EPA national recommendations, uses default values based on national average fish consumption patterns for the U.S. population as a whole to arrive at the 0.3 mg/kg specified in the rule (IDAPA 58.01.02.210.01). In contrast, fish consumption advisories in Idaho typically use site-specific information and address individual fish species or target sensitive subpopulations of fish consumers.

For sensitive subpopulations, the Idaho Fish Consumption Advisory Program (IFCAP) takes a more risk-averse approach by using higher-than-average consumption levels. Thus, an IFCAP advisory does not necessarily indicate that most of the general public would be exposed to unsafe levels of methylmercury or that Idaho's fish tissue human health criterion is exceeded. The IFCAP fish consumption advisories also advise the public on what are safe amounts of *specific kinds of fish* (e.g., walleye or trout) to consume, given measured concentrations for a particular water body. An advisory usually indicates that the human populations listed in the advisory should not eat more than a stated number of meals per week of the kinds of fish listed in the advisory, as doing so would exceed the RfD. Because of this specificity, as well as the targeting of only certain segments of the general population, an advisory is issued even when the average concentration of methylmercury in fish is still below the level of Idaho's fish tissue criterion.

Calculation of Trophic Level Weighted Average

In applying the human health criterion, DEQ is looking at chronic mercury exposure over a lifetime; the criterion was not formulated to protect against acute exposures. In practice, acute exposure is not a big concern because most human exposure is from fish in the diet, and fish tissue mercury levels build up slowly over time. Some variation in exposure to mercury is expected over a lifetime, but if those variations are not large and they average out over time to a level below the criterion, the intended level of protection and safety will be achieved.

Because methylmercury tissue levels do vary over time, from species to species, and from fish to fish, calculation of a value for comparison to the criterion is a matter of much averaging. Idaho's criterion for methylmercury takes into account that bioaccumulation varies by trophic level and species of fish. When data for a given water body represent fish from multiple trophic levels, the water quality standards (IDAPA 58.01.02.210.01) require that results be weighted by trophic level consumption rates.

Water body–specific fish consumption data is preferred and when available should be used to adjust these weightings to provide a better estimate of average human exposure to mercury from that water body. In the absence of location-specific consumption data, trophic level weighting is to be based on the default consumption rates specified in Idaho water quality standards (IDAPA 58.01.02.210.01). Within a trophic level, simple averaging is used to combine results for multiple species to represent that trophic level.

Regardless of the specificity of fish consumption data, the final result is one average methylmercury value for a water body. This result will differ from IFCAP fish consumption advisories, which are species-specific (e.g., rainbow trout, bass, crappie, and walleye), advising the public which kinds of fish are less safe to eat than others.

It is DEQ's position that listing a water body as impaired is based on a weighted average fish tissue mercury concentration for a water body. This average must combine results for all edible species for which data are available. However, if data are only available for one edible species, that is sufficient to make a listing decision on a water body. Data should be from a composite of at least 10 fish per species.

The mercury listings can be viewed on the map in Appendix P.

Wildlife and Aesthetics Beneficial Uses

Wildlife and aesthetics beneficial uses are considered but not assessed for all AUs in the Integrated Report with the sole exception of the 427 AUs that fall wholly within designated wilderness or inventoried roadless areas (Category 1).

How Idaho Water Quality Standards, Numeric and Narrative, Are Interpreted

Specific language detailing how narrative and numeric water quality standards are interpreted in assessments for the Integrated Report is included in Section 5 of the WBAG II (Grafe et al. 2002). DEQ adheres to these policies for all assessments.

DEQ largely relies on BURP monitoring data and biological assessments to demonstrate compliance with the state's narrative water quality standards. These standards are written such that the waters of the state shall be free from pollutants impairing beneficial uses. It is DEQ's position that biological assessments directly measure the support of the beneficial uses that the narrative standards were written to protect, so a full support decision based on guidance in the WBAG II (Grafe et al. 2002) largely satisfies compliance with these narrative standards.

Numeric standards are somewhat different, and a detailed discussion of the state's approach to assessing compliance with these standards is also in Section 5 of the WBAG II (Grafe et al. 2002). Even among the numeric standards, determining compliance with temperature criteria presents unique challenges and is examined in the WBAG II.

Due to natural variability in water quality, variability in translation to a biological response, and possible measurement errors, DEQ does not interpret numeric criteria for conventional pollutants (dissolved oxygen, pH, turbidity, total dissolved gas, and temperature) as a sharp line between impairment and non-impairment. Rather, there is a continuum along which impairment may occur.

Because criteria are developed conservatively, DEQ believes any point along this continuum is within established criteria levels. In accordance with DEQ's water quality standards (IDAPA 58.01.02.054.03), a zone is established allowing up to 10% criteria exceedance for a conventional pollutant(s), for which the assessor has flexibility to consider other evidence in determining whether to list the AU-cause combination in Category 5. This provision in the water quality standards is consistent with guidance from EPA (EPA 1997) and other states in

EPA Region 10 (WDOE 1997). Refer to Figure 5-1 of the WBAG II for an overview of this DEQ policy (Grafe et al. 2002, p. 5-5).

While this policy deals solely with frequency, DEQ does recognize that magnitude and duration of any criteria exceedance is also important to the biological response and ideally should be considered as well. Magnitude, duration, and frequency are typically not independent of one another. Thus, an evaluation of impairment based only on frequency, while it can have its limitations, is a practical gauge of criteria exceedance and one that is supported by national EPA policy.

Failure to meet a numeric or narrative water quality criterion or impairment of a beneficial use will be reason to list an AU in Category 5 of the Integrated Report. If the AU failed to meet specific numeric criteria, then the impairment is related to those criteria (e.g., if it failed to meet temperature criteria, then the cause for the listing is thermal modification). The important point is that Tier I data is available to inform the assessor what the cause or causes are.

DEQ relies heavily on biology to gauge narrative and numeric criteria. An average score of the multimetric index scores (see Grafe et al. 2002, Section 6) can range from 0 to 3. A score of less than 2 suggests that the water body is not supporting its aquatic life beneficial use. Since DEQ does not collect data to evaluate every possible numeric and narrative criteria, the assessor, in many instances, will not know the exact cause of the impairment—merely that impairment exists. Such a determination would list that water body in Category 5 with the cause as "Combined Biota/Habitat Bioassessments."

EPA's clarification memo for the Integrated Report guidance of March 26, 2002, states:

> When existing and readily available data and information (biological, chemical or physical) are sufficient to determine that a pollutant has caused, is suspected of causing, or is projected to cause the impairment, the AU should be listed in Category 5.
>
> (EPA 2002)

The memo further clarifies that "Only when the state determines that the existing data and information (biological, chemical or physical) are **insufficient** [bold in original] to support an attainment determination, can an AU be listed in Category 3" (EPA 2002). DEQ discourages assessors from making educated guesses on causes, because changing a cause after initial listing can be costly in terms of time and resources. DEQ feels it is reasonable and prudent to leave the cause as Combined Biota/Habitat Bioassessment until it can be accurately determined in the subbasin assessment phase of the TMDL.

Statewide Statistical Surveys

The federal CWA establishes a process for states in developing information on the quality of their surface waters. Section 305(b) of the statute requires biennial (every 2 years) reporting on the state's water quality. To fulfill this requirement, DEQ conducted the Idaho Statewide Wadeable Stream Survey from 2005 to 2008 and the Idaho Major Rivers Survey from 2006 to 2008. These surveys were probability-based and designed to provide statistically valid estimates of the condition of the entire population of streams and rivers.

A probabilistic sampling survey is made up of several elements, including the **target population, sample frame**, **sampled population,** and **evaluated sites**. A diagram outlining the conceptual relationships among the elements of a probabilistic sampling survey is presented in Figure 8.

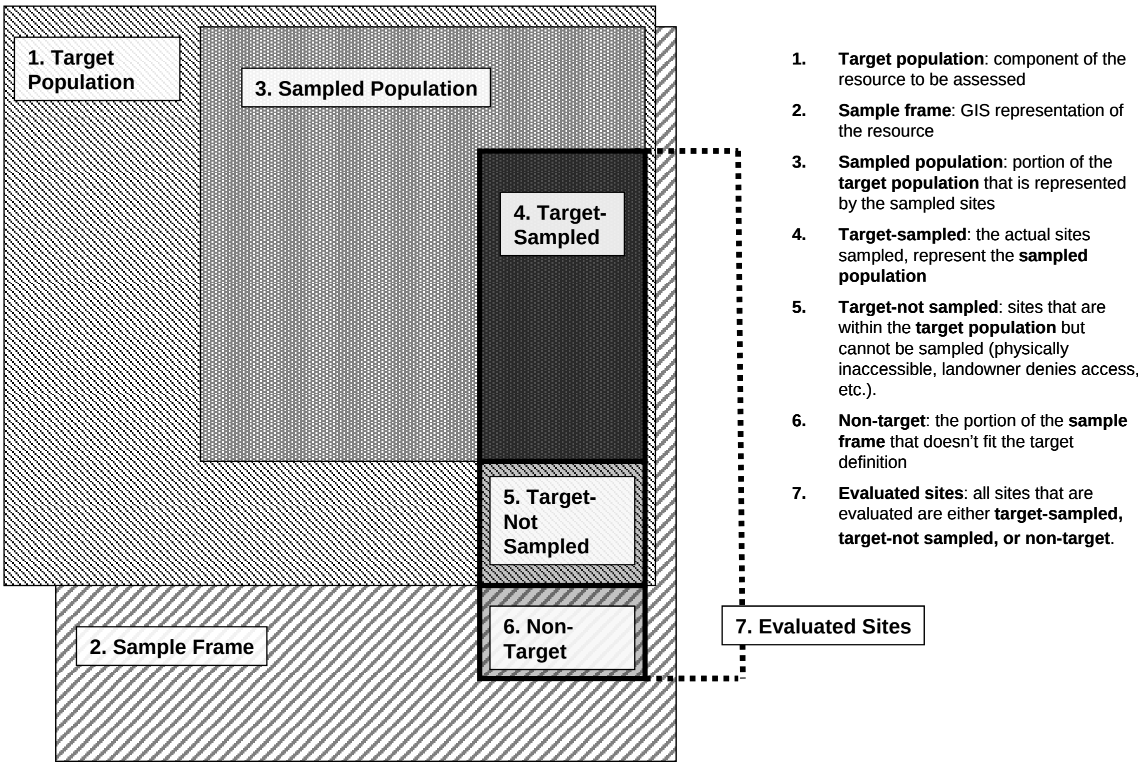

Figure 8. Conceptual representation of elements of a probabilistic sampling survey (modified from Olsen and Peck 2008)

The **sample frame** is a GIS representation of the **target population** from which sites are selected (Figure 8). It is common for the **sample frame** to *include* some elements that are not part of the **target population** and, conversely, to *not include* all elements that are part of the **target population**. Elements of the **sample frame** that are not part of the **target population** are classified as **non-target** (such as reservoirs, lakes, or dry channels in the case of a stream survey). The **sampled population** is the population of the resource represented by the sampled sites and about which we can make statistically valid estimates of condition based on survey results.

Idaho Statewide Wadeable Stream Survey, 2005–2008

The Idaho Statewide Wadeable Stream Survey consisted of 5 separate panels, or site lists, to be completed in each of 5 years (2005–2009). The expected sample size was 50 sites monitored per panel, or a total of 250 sites for the study period. However, the ambient monitoring budget was eliminated for the 2009 field season, so monitoring was limited to the first 4 years. The population being surveyed was wadeable streams in Idaho. The sample frame size was 92,537 miles. To be considered part of the target population, sites had to have an active stream channel and had to be wadeable and sampleable as defined by DEQ's BURP protocol (DEQ 2007).

Statewide, 1,242 sites, representing the 92,537-mile sample frame, were evaluated for target status. Of this total, 52% (standard error [SE] = 1.49), or 47,980 miles were target, and 48% (SE = 1.49), or 44,557 miles, were non-target. Target stream length was further subdivided as being either sampled (target—sampled) or not sampled (target—not sampled) due to accessibility issues or logistical issues (Table 3, part a). Similarly, non-target stream lengths were subdivided based on the reason they were excluded from the target population, with the majority of them being dry when evaluated (Table 3, part b). In all, DEQ field crews evaluated 191 wadeable stream sites throughout Idaho, representing a sampled population of 10,749 miles.

Table 3. Estimated extent (percentages and miles) for evaluated streams in the Idaho Statewide Wadeable Stream Survey, with sub-categories for target and non-target subpopulations

		%	Standard error (SE)	Miles
a)	Target			
	Access denied	9.9	0.86	9,184
	Inaccessible	29.8	1.46	27,598
	Target—not sampled	0.5	0.15	448
	Target—sampled	11.6	1.08	10,749
	Total	**51.8**	**1.49**	**47,980**
b)	Non-target			
	Dry	39.9	1.46	36,963
	Non-wadeable	2.3	0.23	2,142
	Other	5.9	0.88	5,452
	Total	**48.2**	**1.49**	**44,557**

Note: Percentages and miles may not add up exactly due to rounding.

Condition estimates for the Idaho Statewide Wadeable Stream Survey apply to the sampled population only.

DEQ determines ecological condition of wadeable streams based on multimetric indices of ecological integrity: the stream macroinvertebrate index (SMI), stream fish index (SFI), and stream habitat index (SHI). Condition ratings are calculated based on integrating these indices following the methodology laid out in the *Idaho Small Stream Ecological Assessment Framework* (DEQ 2002b). Sites receive a condition rating from 0 to 3. Sites with a condition rating greater than 2.5 were classified as good; sites with a condition rating from 2 through 2.5 were classified as fair, and those with a condition rating less than 2 were classified as poor.

The highest proportion of stream length classified as good is found in the DEQ Boise Region, while the lowest is found in the Pocatello Region (Figure 9).

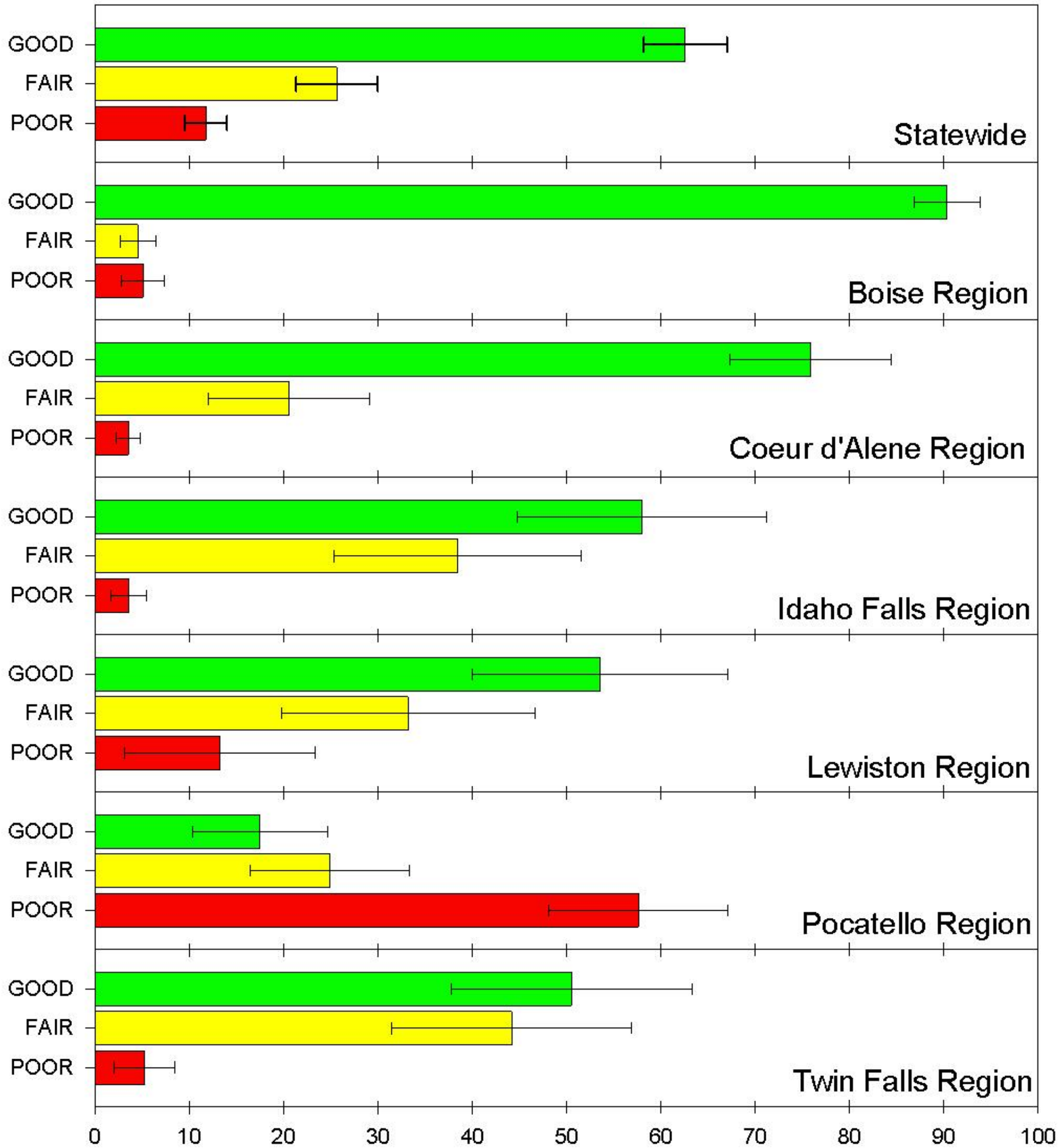

Figure 9. Statewide and regional results for the Idaho Statewide Wadeable Stream Survey, presented as percentages of stream length by condition class (i.e., good, fair, or poor)

Statewide, 62.6% (SE = 4.40) of the sampled population, representing 6,728 miles, was in good condition; 25.7% (SE = 4.32), representing 2,759 miles, was in fair condition; and 11.7% (SE = 2.26), representing 1,263 miles, was in poor condition (Figure 9).

Stream lengths classified as either good or fair are considered to be fully supporting cold water aquatic life, while stream lengths classified as poor are considered to be not fully supporting cold water aquatic life.

Statewide, 88.3% of Idaho's wadeable streams are fully supporting cold water aquatic life, while 11.7% are not fully supporting. This survey indicates that the vast majority of Idaho's wadeable streams are in either good or fair condition (Table 4).

Table 4. Support status by stream length (miles) and percentage of stream length statewide and for each of the six DEQ regions

	Fully Supporting		Not Fully Supporting	
	(miles)	(%)	(miles)	(%)
Statewide	9,486	88.3	1,263	11.7
Boise Region	2,822	94.9	151	5.1
Coeur d'Alene Region	957	96.5	35	3.5
Idaho Falls Region	2,369	96.4	88	3.6
Lewiston Region	1,686	86.7	258	13.3
Pocatello Region	490	42.4	666	57.6
Twin Falls Region	1,163	94.7	65	5.3

Idaho Major Rivers Survey, 2006–2008

The Idaho Major Rivers Survey consisted of two separate panels, or site lists, to be completed in each of 2 years, 2006 and 2008. The expected sample size was 25 sites monitored per panel, or a total of 50 sites for the study period. The population being surveyed was major rivers in Idaho as identified by the DEQ Major Rivers GIS coverage. The sample frame size was 4,589 miles. To be considered part of the target population, sites had to have an active stream channel with flowing water present.

Statewide, 100 sites representing the 4,589-mile sample frame were evaluated for target status. Of this total, 74% (SE = 3.27), or 3,396 miles, were target and 26% (SE = 3.27), or 1,193 miles, were non-target. Target river length was further subdivided as being either sampled (target—sampled) or not sampled due to accessibility (either inaccessible or landowner denied access) (Table 5). In all, DEQ field crews monitored 49 major river sites throughout Idaho, representing a sampled population of 2,249 miles.

Table 5. Estimated extent (percentages and miles) of evaluated streams in the Idaho Major Rivers Survey

	%	Standard error (SE)	Miles
Access denied	10	2.6	459
Inaccessible	15	3.0	688
Target—sampled	49	3.3	2,249
Total target	74	3.3	3,396
Non-target	26	3.3	1,193

Condition estimates for the Idaho Major Rivers Survey apply to the sampled population only.

For the Idaho Major Rivers Survey, DEQ determined ecological condition based on multimetric indices of ecological integrity: a three-metric river macroinvertebrate index (Kosterman et al. 2008) and the river fish index (DEQ 2002a).

Fish could not be collected from every site due to restrictions in collection permits. For sites where both macroinvertebrate and fish data were available, we estimated overall ecological integrity based on both indices; for sites where fish data were unavailable, we based biological condition determination on macroinvertebrates alone. Condition categories were assigned in a manner similar to the method used for streams. Sites receiving a condition rating greater than 2.5 were classified as good; sites with a condition rating from 2 through 2.5 were classified as fair, and sites with a condition rating less than 2 were classified as poor.

Biological condition was good at 40.8% (SE = 4.53), or 918 miles, of Idaho’s major river length; fair at 40.8% (SE = 5.49), or 918 miles; and poor at 18.4% (SE = 4.65), or 413 miles (Figure 10).

Statewide, 51% (SE = 5.03), or 1,147 miles, of Idaho major river length had macroinvertebrate communities in good condition; 39% (SE = 4.71), or 872 miles, was fair; and 10% (SE = 3.21), or 229 miles, was poor (Figure 10).

Similarly, 39% (SE = 4.95), or 872 miles, of Idaho major river length had fish communities in good condition; 2% (SE = 1.84), or 46 miles, was fair; and 22% (SE = 4.89), or 505 miles, was poor. An estimated 37% (SE = 5.24), or 826 miles, were unassessed (Figure 10).

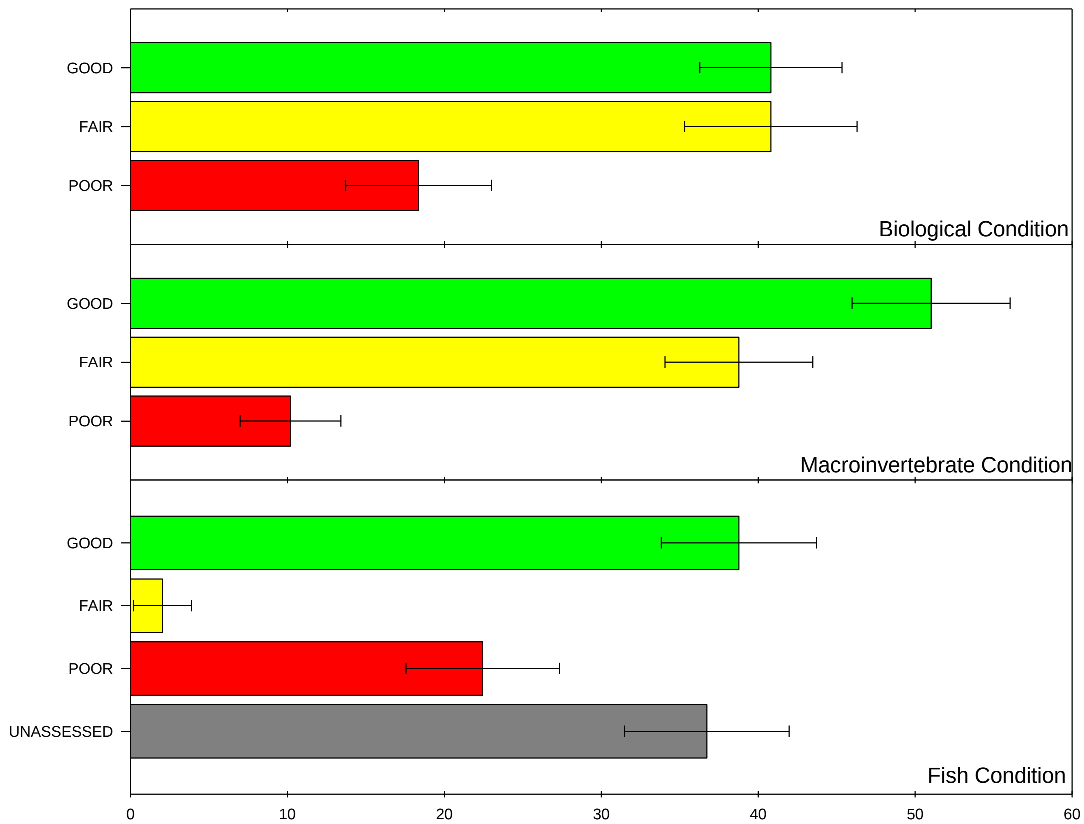

Figure 10. Statewide biological condition, macroinvertebrate condition, and fish condition for Idaho's major rivers, as percentages of river length by condition class

Unlike wadeable streams, the number and length of major rivers in Idaho vary significantly among DEQ regions; in addition, the sample size was limited. Therefore, we did not stratify Idaho major rivers by DEQ region and are thus unable to estimate Idaho major river extent and condition by DEQ region.

Public Participation in the Development of the Integrated Report

The public was provided the opportunity to participate in the development of the Integrated Report in two ways: 1) submission of data and 2) review of and comments on the Principles and Policies document and the status of all Idaho waters. The format, however, of the Integrated Report is established by EPA, so DEQ did not seek comment on this aspect of the report. DEQ also strives to continuously interact with other data-collecting organizations and facilitate the exchange of data and information.

Initially, the public comment period for the draft 2010 Integrated Report was scheduled to run from September 27, 2010, through October 27, 2010. However, due to public request, DEQ extended the public comment period an additional 30 days. Therefore, the public comment period closed on Monday, November 29, 2010. The public comment news release was disseminated to news media throughout Idaho and posted to DEQ’s website. DEQ received 21 sets of comments from various stakeholders around the state and EPA Region 10. Comments and water quality monitoring data received by DEQ up to the close of the public comment period were evaluated and considered in the preparation of the final 2010 Integrated Report. A responsiveness summary on the public comments received on the draft report is available in Appendix Q.

Integrated Report Milestones and Project Completion

Milestones for development of the Integrated Report, including opportunities for public comment, are shown in Table 6.

Table 6. Integrated Report development milestones

July 2009	Begin 60-day call for data
September 2009	Close the call for data; begin assessment of new water quality monitoring data
April 2010	Complete assessment of water bodies for 2010 Integrated Report
September 2010	Draft Integrated Report compiled; begin 60-day public comment period
November 2010	Close public comment period; begin response to comments
April 2011	Submit draft response to comments to EPA for review and approval
August 2011	Final Integrated Report delivered to EPA

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References

Anderson, T.M., and N.H. Anderson. 1995. The Insect Fauna of Spring Habitats in Semiarid Rangelands in Central Oregon. Journal of the Kansas Entomological Society 68(2 Suppl.): 65–76.

DEQ (Idaho Department of Environmental Quality). 2002a. Idaho River Ecological Assessment Framework. Boise, ID: DEQ. Available at *http://www.deq.idaho.gov/surface-water-monitoring-assessment.*

DEQ (Idaho Department of Environmental Quality). 2002b. Idaho Small Stream Ecological Assessment Framework. Boise, ID: DEQ. Available at *http://www.deq.idaho.gov/surface-water-monitoring-assessment.*

DEQ (Idaho Department of Environmental Quality). 2002c. Settlement Agreement. Available at *http://www.deq.idaho.gov/tmdls.*

DEQ (Idaho Department of Environmental Quality). 2003. Concepts and Recommendations for Using the "Natural Conditions" Provisions of the Idaho Water Quality Standards. Boise, ID: DEQ. Available at *http://www.deq.idaho.gov/natural-background-conditions.*

DEQ (Idaho Department of Environmental Quality). 2005. Implementation Guidance for the Idaho Mercury Water Quality Criteria. Boise, ID: DEQ. Available at *http://www.deq.idaho.gov/surface-water-mercury.*

DEQ (Idaho Department of Environmental Quality). 2007. Beneficial Use Reconnaissance Program Field Manual for Streams. Boise, ID: DEQ. Available at *http://www.deq.idaho.gov/media/457041-burp_field_manual_2007_entire.pdf*.

DEQ and USFS (Idaho Department of Environmental Quality and U.S. Forest Service). 2010. Bear Valley Creek 4b Justification. Boise, ID: DEQ and USFS. Available at *http://www.deq.idaho.gov/salmon-river-middle-fork-subbasin*.

EPA (U.S. Environmental Protection Agency). 1997. Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement. EPA-841-B- 97-002B.

EPA (U.S. Environmental Protection Agency). 2001. 2002 Integrated Water Quality Monitoring and Assessment Report Guidance. Memo dated November 19, 2001. Available at *http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm*.

EPA (U.S. Environmental Protection Agency). 2002. Clarification of the Use of Biological Data and Information in the 2002 Integrated Water Quality Monitoring and Assessment Report Guidance. March 26, 2002. Available at *http://www.epa.gov/owow/tmdl/guidance/biochange20302.html*.

EPA (U.S. Environmental Protection Agency). 2005. Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act. July 29, 2005. Available at *http://www.epa.gov/owow/tmdl/2006IRG/report/2006irg-report.pdf*.

EPA (U.S. Environmental Protection Agency). 2006. Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. October 12, 2006. Available at *http://www.epa.gov/owow/tmdl/2008_ir_memorandum.html*.

EPA (U.S. Environmental Protection Agency). 2009. Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. May 5, 2009. Available at *http://www.epa.gov/owow/tmdl/guidance/final52009.html#memo*.

Grafe, C.S., C.A. Mebane, M.J. Mcintyre, D.A. Essig, D.H. Brandt, and D.T. Mosier. 2002. Water Body Assessment Guidance, Second Edition. Boise, ID: Idaho Department of Environmental Quality.

Kosterman, M.A., D. Sharp, and R. Remington. 2008. Idaho Assessment of Ecological Condition. Boise, ID: Idaho Department of Environmental Quality. Available at *http://www.deq.idaho.gov/media/678356-idaho-assessment-ecological-condition-report.pdf.*

Maret, T.R., C.T. Robinson, and G.W. Minshall. 1997. Fish Assemblages and Environmental Correlates in Least-Disturbed Streams of the Upper Snake River Basin. Transactions of the American Fisheries Society 126:200–216.

Maret, T.R., D.E. MacCoy, K.D. Skinner, S.E. Moore, and I. O'Dell. 2001. Evaluation of Macroinvertebrate Assemblages in Idaho Rivers Using Multimetric and Multivariate Techniques, 1996–98. Boise, ID: U.S. Geological Survey. Water Resources Investigations Report 01-4145.

Mebane, C.A. 2001. Testing Bioassessment Metrics: Macroinvertebrate, Sculpin, and Salmonid Responses to Stream Habitat, Sediment, and Metals. Environmental Monitoring and Assessment 67:292–322.

Olsen, A.R., and D.V. Peck. 2008. Survey Design and Extent Estimates for the Wadeable Streams Assessment. Journal of the North American Benthological Society 27:822–836.

RTI (Research Triangle Institute). 2007. ADB 2.3.0 Release Notes. November 2007.

WDOE (Washington Department of Ecology). 1997. Criteria for Information Used in Listing. WQP Policy 1-11, Chapter 1, Section 3. Olympia, WA: WDOE.

Appendix A. Maps Showing the Status of All State Waters

This appendix includes three maps. The first is an overall map that includes all water bodies in the state. If you would like to view or print the original file, which is formatted as a 32 by 42 inch page, please visit *http://www.deq.idaho.gov/integrated-report#2010-IR*. The second map shows the status of all Idaho streams, and the third displays the status of all Idaho lakes and reservoirs.

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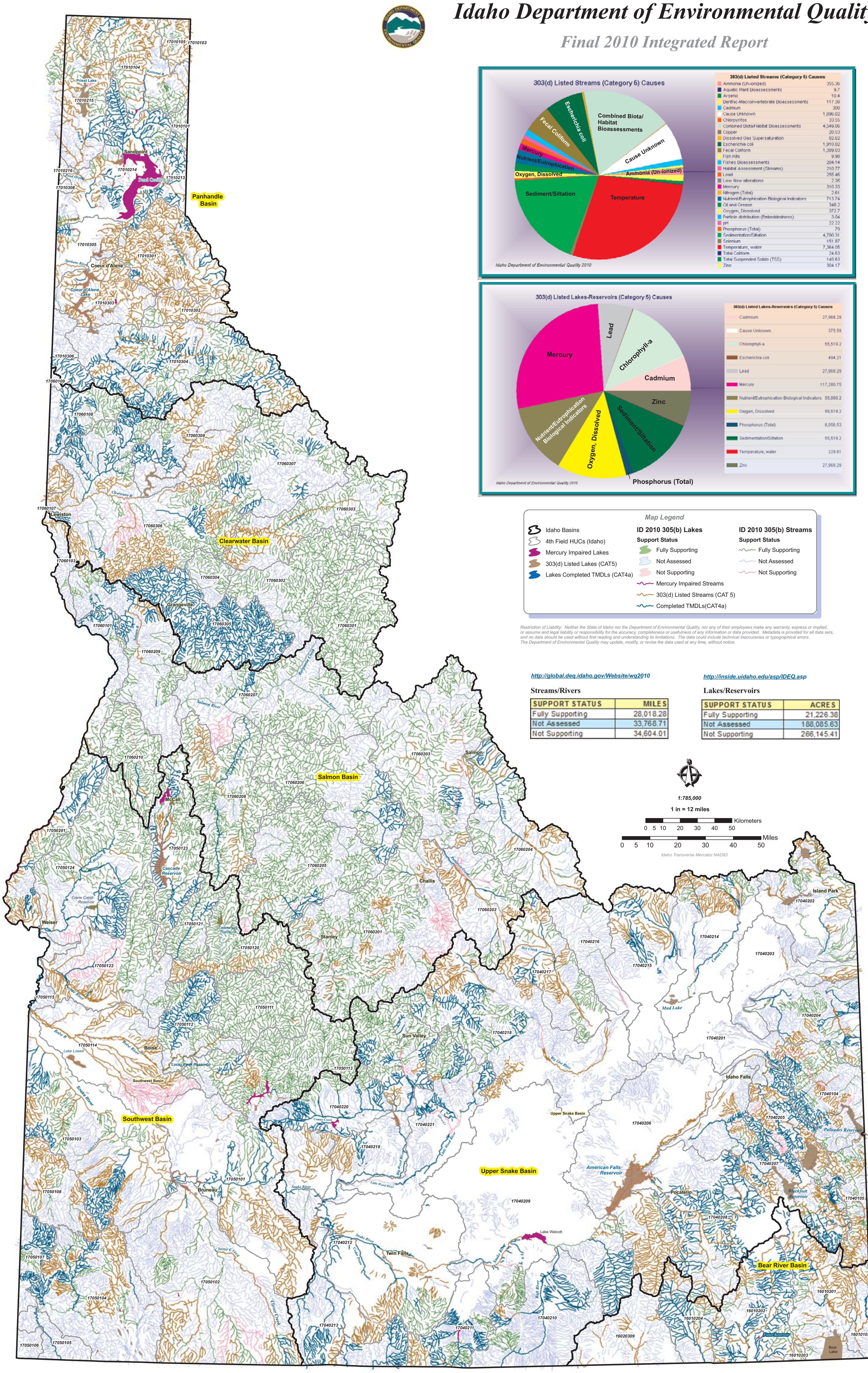
Idaho Department of Environmental Quality

Final 2010 Integrated Report



Restriction of Liability: Neither the State of Idaho nor the Department of Environmental Quality, nor any of their employees make any warranty, express or implied, or assume and legal liability or responsibility for the accuracy, completeness or usefulness of any information or data provided. Metadata is provided for all data sets, and no data should be used without first reading and understanding its limitations. The data could include technical inaccuracies or typographical errors. The Department of Environmental Quality may update, modify, or revise the data used at any time, without notice.

http://global.deq.idaho.gov/Website/wq2010

Streams/Rivers

SUPPORT STATUS	MILES
Fully Supporting	28,018.28
Not Assessed	33,768.71
Not Supporting	34,604.01

http://inside.uidaho.edu/asp/IDEQ.asp

Lakes/Reservoirs

SUPPORT STATUS	ACRES
Fully Supporting	21,226.38
Not Assessed	188,085.63
Not Supporting	266,145.41

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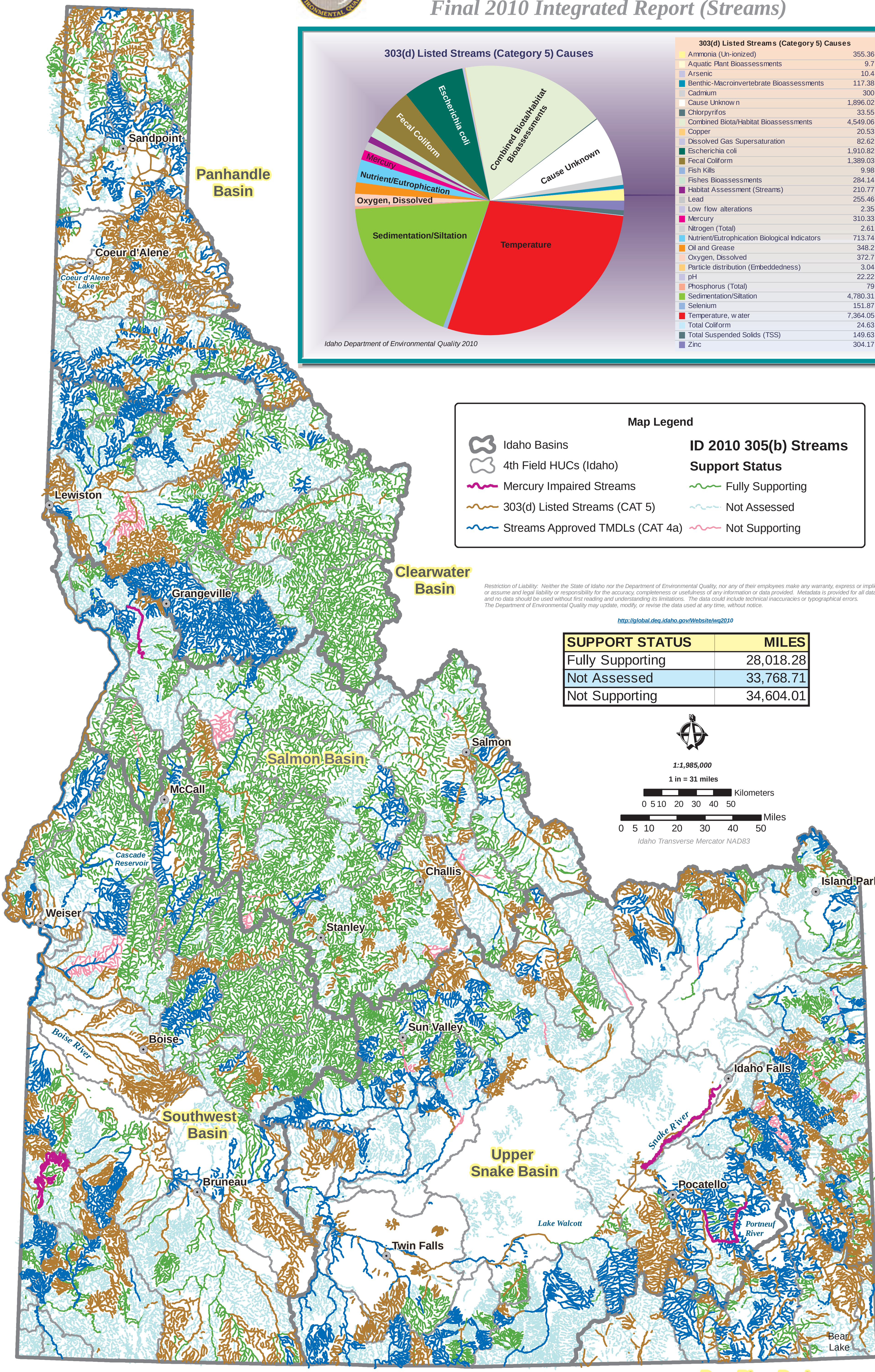
Final 2010 Integrated Report (Streams)



303(d) Listed Streams (Category 5) Causes	
Ammonia (Un-ionized)	355.36
Aquatic Plant Bioassessments	9.7
Arsenic	10.4
Benthic-Macroinvertebrate Bioassessments	117.38
Cadmium	300
Cause Unknown	1,896.02
Chlorpyrifos	33.55
Combined Biota/Habitat Bioassessments	4,549.06
Copper	20.53
Dissolved Gas Supersaturation	82.62
Escherichia coli	1,910.82
Fecal Coliform	1,389.03
Fish Kills	9.98
Fishes Bioassessments	284.14
Habitat Assessment (Streams)	210.77
Lead	255.46
Low flow alterations	2.35
Mercury	310.33
Nitrogen (Total)	2.61
Nutrient/Eutrophication Biological Indicators	713.74
Oil and Grease	348.2
Oxygen, Dissolved	372.7
Particle distribution (Embeddedness)	3.04
pH	22.22
Phosphorus (Total)	79
Sedimentation/Siltation	4,780.31
Selenium	151.87
Temperature, water	7,364.05
Total Coliform	24.63
Total Suspended Solids (TSS)	149.63
Zinc	304.17

Map Legend

- Idaho Basins
- 4th Field HUCs (Idaho)
- Mercury Impaired Streams
- 303(d) Listed Streams (CAT 5)
- Streams Approved TMDLs (CAT 4a)

ID 2010 305(b) Streams Support Status

- Fully Supporting
- Not Assessed
- Not Supporting

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http://global.deq.idaho.gov/Website/wq2010

SUPPORT STATUS	MILES
Fully Supporting	28,018.28
Not Assessed	33,768.71
Not Supporting	34,604.01

1:1,985,000

1 in = 31 miles

Kilometers: 0 5 10 20 30 40 50

Miles: 0 5 10 20 30 40 50

Idaho Transverse Mercator NAD83

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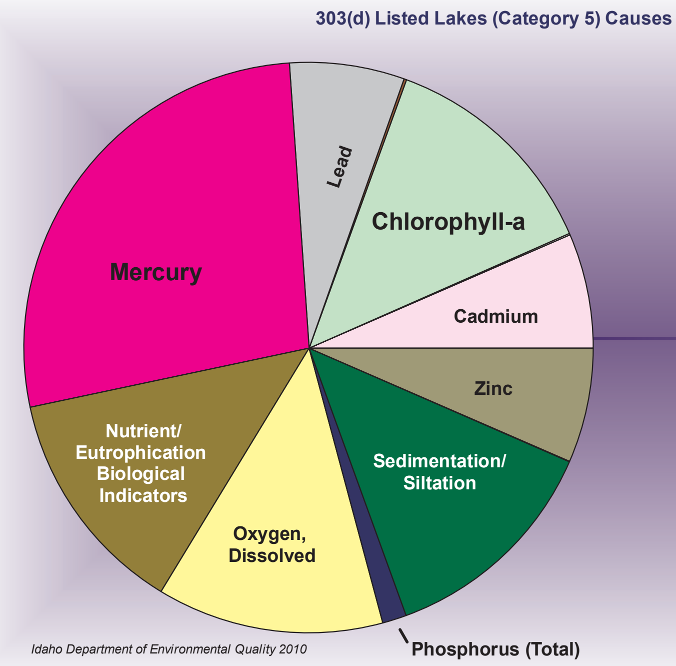
Idaho Department of Environmental Quality

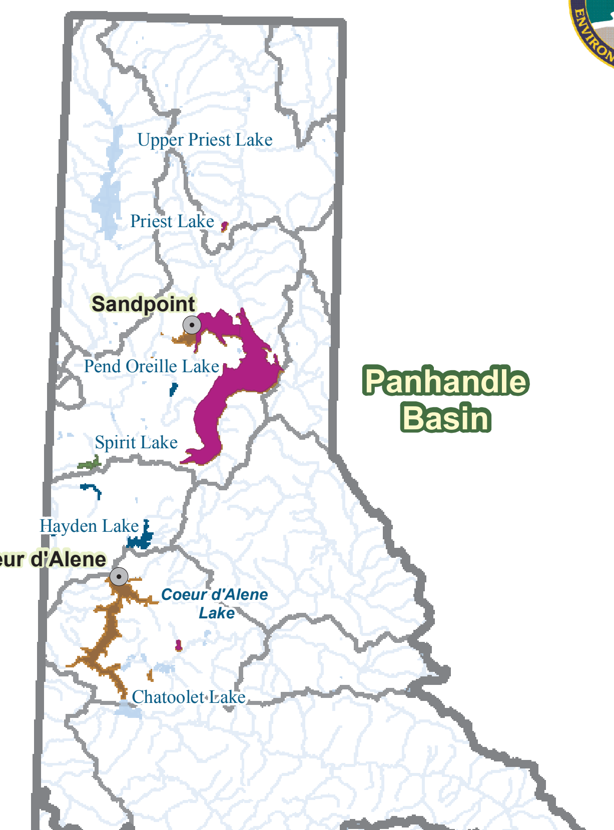
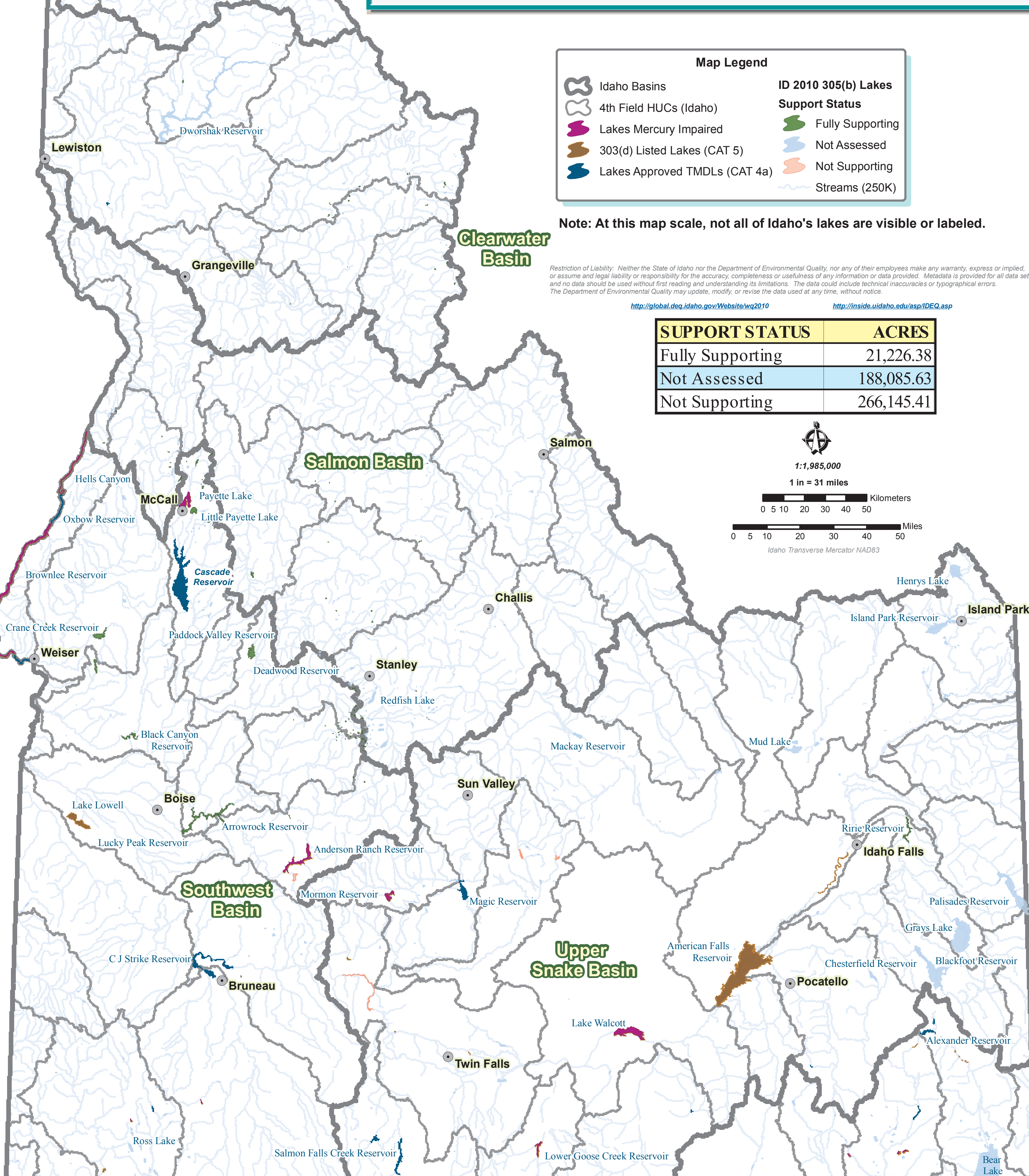
Final 2010 Integrated Report (Lakes-Reservoirs)

303(d) Listed Lakes (Category 5) Causes



Idaho Department of Environmental Quality 2010

303(d) Listed Lakes (Category 5) Causes	
Cadmium	27,968.29
Cause Unknown	375.59
Chlorophyll-a	55,519.2
Escherichia coli	494.21
Lead	27,968.29
Mercury	117,280.75
Nutrient/Eutrophication Biological Indicators	55,860.2
Oxygen, Dissolved	55,519.2
Phosphorus (Total)	6,056.53
Sedimentation/Siltation	55,519.2
Temperature, water	229.81
Zinc	27,968.29

Map Legend

- Idaho Basins
- 4th Field HUCs (Idaho)
- Lakes Mercury Impaired
- 303(d) Listed Lakes (CAT 5)
- Lakes Approved TMDLs (CAT 4a)

ID 2010 305(b) Lakes Support Status

- Fully Supporting
- Not Assessed
- Not Supporting
- Streams (250K)

Note: At this map scale, not all of Idaho's lakes are visible or labeled.

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http://global.deq.idaho.gov/Website/wq2010 http://inside.uidaho.edu/asp/IDEQ.asp

SUPPORT STATUS	ACRES
Fully Supporting	21,226.38
Not Assessed	188,085.63
Not Supporting	266,145.41

1:1,985,000

1 in = 31 miles

Kilometers 0 5 10 20 30 40 50

Miles 0 5 10 20 30 40 50

Idaho Transverse Mercator NAD83

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Appendix B. Newly Added Wilderness/Roadless Assessment Units

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Bear River Basin

ID16010201BR014_02aL

Panhandle Basin

ID17010104PN006_02L
ID17010104PN008_02L
ID17010104PN011_01L
ID17010104PN011_02L
ID17010104PN016_02L
ID17010104PN017_02L
ID17010213PN016_02L
ID17010213PN019_02L
ID17010214PN041_01L
ID17010215PN012_01L
ID17010302PN012_02L
ID17010304PN041_01L
ID17010304PN041_02L

Upper Snake Basin

ID17040202SK034_02L
ID17040210SK007_02L
ID17040217SK021_02L
ID17040217SK024_02L
ID17040218SK027_02L
ID17040218SK032_02L
ID17040218SK036_02L
ID17040221SK020_02L
ID17040221SK020_03

Southwest Basin

ID17050107SW001_07
ID17050111SW011_02
ID17050120SW005_03
ID17050120SW007_03
ID17050123SW011_02aL

Salmon Basin

ID17060101SL007_02L
ID17060101SL010_02L
ID17060201SL046_02L
ID17060201SL055_02L
ID17060201SL058_01L
ID17060201SL058_0L
ID17060201SL060_01L
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ID17060201SL061_02L
ID17060201SL062_02L
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ID17060204SL037_02L
ID17060204SL052b_02L
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ID17060209SL021_0L
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ID17060209SL041_02a
ID17060209SL041_02L
ID17060210SL003_02L
ID17060210SL014_02L

Clearwater Basin

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ID17060301CL022_02L
ID17060301CL023_02L
ID17060301CL024_02L
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ID17060301CL040_02L
ID17060301CL042_0L
ID17060301CL051_02L
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ID17060307CL048_02
ID17060307CL048_03
ID17060308CL012_02L
ID17060308CL013_02L

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Appendix C. Category 1—Waters of the State Wholly within Designated Wilderness or Inventoried Roadless Area Where Standards are Presumed to be Attained

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2010 Integrated Report: Category 1: Waters Wholly within Wilderness or Roadless Areas Where Standards are Presumed to be Attained

Clearwater

17060301 Upper Selway

ID17060301CL001_02	Selway River - Bear Creek to Moose Creek	19.87	MILES
ID17060301CL001_05	Selway River - Bear Creek to Moose Creek	10.56	MILES
ID17060301CL002_02	Magpie Creek - source to mouth	4.53	MILES
ID17060301CL003_02	Bitch Creek - source to mouth	10.31	MILES
ID17060301CL004_02	Selway River - White Cap Creek to Bear Creek	22.97	MILES
ID17060301CL004_05	Selway River - White Cap Creek to Bear Creek	16.18	MILES
ID17060301CL005_02	Ditch Creek - source to mouth	19.71	MILES
ID17060301CL005_03	Ditch Creek - source to mouth	2.01	MILES
ID17060301CL006_02	Elk Creek - source to mouth	10.13	MILES
ID17060301CL007_02	Goat Creek - source to mouth	36.18	MILES
ID17060301CL007_03	Goat Creek - source to mouth	8.57	MILES
ID17060301CL008_02	Running Creek - Lynx Creek to mouth	33.08	MILES
ID17060301CL008_03	Running Creek - Lynx Creek to mouth	10.49	MILES
ID17060301CL009_02	Running Creek - source to Lynx Creek	22.08	MILES
ID17060301CL009_03	Running Creek - source to Lynx Creek	3.68	MILES
ID17060301CL010_02	South Fork Running Creek - source to mouth	9.6	MILES
ID17060301CL011_02	Lynx Creek - source to mouth	13.9	MILES
ID17060301CL012_02	Eagle Creek - source to mouth	27	MILES
ID17060301CL013_02	Crooked Creek - source to mouth	16.34	MILES
ID17060301CL013_03	Crooked Creek - source to mouth	3.49	MILES
ID17060301CL014_02	Selway River - Deep Creek to White Cap Creek	44.32	MILES
ID17060301CL014_04	Selway River - Deep Creek to White Cap Creek	5.55	MILES
ID17060301CL014_05	Selway River - Deep Creek to White Cap Creek	9.24	MILES
ID17060301CL015_02	Little Clearwater River- Flat Creek to mouth	8.59	MILES
ID17060301CL015_04	Little Clearwater River- Flat Creek to mouth	6.02	MILES
ID17060301CL016_02	Short Creek - source to mouth	13.09	MILES
ID17060301CL017_02	Little Clearwater River - source to Flat Creek	13.98	MILES
ID17060301CL017_03	Little Clearwater River - source to Flat Creek	1.32	MILES
ID17060301CL017_04	Little Clearwater River - source to Flat Creek	3.12	MILES
ID17060301CL018_02	Burnt Knob Creek - source to mouth	17.06	MILES
ID17060301CL018_02L	Burnt Knob Lakes	6.08	ACRES
ID17060301CL018_03	Burnt Knob Creek - source to mouth	1.56	MILES

ID17060301CL019_02	Salamander Creek - source to mouth	18.73	MILES
ID17060301CL019_03	Salamander Creek - source to mouth	4.22	MILES
ID17060301CL020_02	Flat Creek - source to mouth	14.62	MILES
ID17060301CL021_02	Magruder Creek - source to mouth	12.17	MILES
ID17060301CL022_02	Selway River - confluence of Hidden and Surprise Creeks to D	67.39	MILES
ID17060301CL022_03	Selway River - confluence of Hidden and Surprise Creeks to D	7.38	MILES
ID17060301CL022_04	Selway River - confluence of Hidden and Surprise Creeks to D	7.74	MILES
ID17060301CL023_02	Three Lakes Creek - source to mouth	18.67	MILES
ID17060301CL023_03	Three Lakes Creek - source to mouth	1.66	MILES
ID17060301CL024_02	Swet Creek - source to mouth	12.95	MILES
ID17060301CL025_02	Stripe Creek - source to mouth	4.4	MILES
ID17060301CL026_02	Hidden Creek - source to mouth	6.72	MILES
ID17060301CL027_02	Surprise Creek - source to mouth	13.63	MILES
ID17060301CL028_02	Wilkerson Creek - Storm Creek to mouth	15.06	MILES
ID17060301CL028_03	Wilkerson Creek - Storm Creek to mouth	4.56	MILES
ID17060301CL029_02	Wilkerson Creek - source to Storm Creek	8.84	MILES
ID17060301CL030_03	Storm Creek - source to mouth	3.27	MILES
ID17060301CL031_02	Deep Creek - source to mouth	24	MILES
ID17060301CL031_03	Deep Creek - source to mouth	9.68	MILES
ID17060301CL032_02	Vance Creek - source to mouth	6.16	MILES
ID17060301CL033_02	Lazy Creek - source to mouth	11.59	MILES
ID17060301CL033_03	Lazy Creek - source to mouth	1.37	MILES
ID17060301CL034_02	Pete Creek - source to mouth	5.13	MILES
ID17060301CL035_02	Cayuse Creek - source to mouth	14.81	MILES
ID17060301CL036_02	Indian Creek - source to mouth	36.17	MILES
ID17060301CL036_03	Indian Creek - source to mouth	7.49	MILES
ID17060301CL037_02	Schofield Creek - source to mouth	12.99	MILES
ID17060301CL038_02	Snake Creek - source to mouth	10.56	MILES
ID17060301CL039_02	White Cap Creek - Canyon Creek to mouth	36.55	MILES
ID17060301CL039_03	White Cap Creek - Canyon Creek to mouth	3.09	MILES
ID17060301CL039_04	White Cap Creek - Canyon Creek to mouth	7.69	MILES
ID17060301CL040_02	Canyon Creek - source to mouth	37.69	MILES
ID17060301CL040_03	Canyon Creek - source to mouth	1.37	MILES
ID17060301CL041_02	Cooper Creek - source to mouth	10.78	MILES
ID17060301CL041_03	Cooper Creek - source to mouth	0.72	MILES
ID17060301CL042_01L	Triple Lakes	15.68	ACRES
ID17060301CL042_02	White Cap Creek - source to Canyon Creek	49.06	MILES
ID17060301CL042_02L	White Cap Lakes	36.16	ACRES
ID17060301CL042_03	White Cap Creek - source to Canyon Creek	12.71	MILES
ID17060301CL043_02	Paloma Creek - source to mouth	6.74	MILES

ID17060301CL044_02	Bad Luck Creek - source to mouth	21.82	MILES
ID17060301CL045_02	Gardner Creek - source to mouth	9.82	MILES
ID17060301CL046_02	North Star Creek - source to mouth	7.25	MILES
ID17060301CL047_02	Bear Creek - Cub Creek to mouth	13.01	MILES
ID17060301CL047_04	Bear Creek - Cub Creek to mouth	4.92	MILES
ID17060301CL048_02	Cub Creek - Brushy Fork Creek to mouth	5.82	MILES
ID17060301CL048_03	Cub Creek - Brushy Fork Creek to mouth	4.29	MILES
ID17060301CL049_02	Brushy Fork Creek - source to mouth	20.66	MILES
ID17060301CL049_02L	Brushy Fork Lake	19.5	ACRES
ID17060301CL049_03	Brushy Fork Creek - source to mouth	2.81	MILES
ID17060301CL050_02	Cub Creek - source to Brushy Fork Creek	24.32	MILES
ID17060301CL050_02L	Cub Lake	40.42	ACRES
ID17060301CL051_02	Paradise Creek - source to mouth	31.15	MILES
ID17060301CL052_02	Bear Creek - Wahoo Creek to Cub Creek	21.72	MILES
ID17060301CL052_03	Bear Creek - Wahoo Creek to Cub Creek	8.65	MILES
ID17060301CL053_02	Bear Creek - source to Wahoo Creek	18.56	MILES
ID17060301CL054_02	Granite Creek - source to mouth	6.92	MILES
ID17060301CL055_02	Wahoo Creek - source to mouth	14.2	MILES
ID17060301CL055_03	Wahoo Creek - source to mouth	5.51	MILES
ID17060301CL056_02	Pettibone Creek - source to mouth	30.91	MILES
ID17060301CL056_03	Pettibone Creek - source to mouth	9.82	MILES
ID17060301CL057_02	Cow Creek - source to mouth	3.16	MILES
ID17060301CL058_02	Dog Creek - source to mouth	9.26	MILES

17060302 Lower Selway

ID17060302CL019_02	East Fork Meadow Creek - source to mouth	17.23	MILES
ID17060302CL020_02	Schwar Creek - source to mouth	22.69	MILES
ID17060302CL021_02	Buck Lake Creek - source to mouth	27.66	MILES
ID17060302CL021_02L	Buck Lake	4.14	ACRES
ID17060302CL021_03	Buck Lake Creek - source to mouth	10.73	MILES
ID17060302CL023_02	Otter Creek - source to mouth	18.18	MILES
ID17060302CL024_02	Mink Creek - source to mouth	14.71	MILES
ID17060302CL024_03	Mink Creek - source to mouth	4.52	MILES
ID17060302CL025_02	Marten Creek - source to mouth	33.61	MILES
ID17060302CL025_03	Marten Creek - source to mouth	5.22	MILES
ID17060302CL026_02	Trout Creek - source to mouth	12.28	MILES
ID17060302CL027_02	Moose Creek - East Fork Moose Creek to mouth	5.52	MILES
ID17060302CL027_05	Moose Creek - East Fork Moose Creek to mouth	3.73	MILES
ID17060302CL028_02	East Fork Moose Creek - Cedar Creek to Moose Creek	27.94	MILES
ID17060302CL028_04	East Fork Moose Creek - Cedar Creek to Moose Creek	14.05	MILES

ID17060302CL029_02	Freeman Creek - source to mouth	3.34	MILES
ID17060302CL030_02	Monument Creek - source to mouth	7.17	MILES
ID17060302CL031_02	Elbow Creek - source to mouth	10.86	MILES
ID17060302CL032_02	Battle Creek - source to mouth	13.76	MILES
ID17060302CL033_02	East Fork Moose Creek - source to Cedar Creek	45.89	MILES
ID17060302CL033_02L	Goat Lakes	41.15	ACRES
ID17060302CL033_03	East Fork Moose Creek - source to Cedar Creek	11.67	MILES
ID17060302CL034_02	Chute Creek - source to mouth	2.88	MILES
ID17060302CL035_02	Dead Elk Creek - source to mouth	3.92	MILES
ID17060302CL036_02	Cedar Creek - source to mouth	27.04	MILES
ID17060302CL036_03	Cedar Creek - source to mouth	5.14	MILES
ID17060302CL037_02	Maple Creek - source to mouth	12.69	MILES
ID17060302CL038_02	Double Creek - source to mouth	15.46	MILES
ID17060302CL039_02	Fitting Creek - source to mouth	4.88	MILES
ID17060302CL040_02	North Fork Moose Creek - Rhoda Creek to mouth	29.68	MILES
ID17060302CL040_03	North Fork Moose Creek - Rhoda Creek to mouth	0.57	MILES
ID17060302CL040_05	North Fork Moose Creek - Rhoda Creek to mouth	7.26	MILES
ID17060302CL041_02	North Fork Moose Creek - West Moose Creek to Rhoda Creek	10.89	MILES
ID17060302CL041_04	North Fork Moose Creek - West Moose Creek to Rhoda Creek	11.37	MILES
ID17060302CL042_02	North Fork Moose Creek - source to West Fork Moose Creek	24.65	MILES
ID17060302CL042_03	North Fork Moose Creek - source to West Fork Moose Creek	2.88	MILES
ID17060302CL043_02	West Fork Moose Creek - source to mouth	35.65	MILES
ID17060302CL043_03	West Fork Moose Creek - source to mouth	4.76	MILES
ID17060302CL044_02	Rhoda Creek - Wounded Doe Creek to mouth	2.86	MILES
ID17060302CL044_04	Rhoda Creek - Wounded Doe Creek to mouth	3.18	MILES
ID17060302CL045_01L	Wounded Doe Creek Lake	7	ACRES
ID17060302CL045_02	Wounded Doe Creek - source to mouth	22.86	MILES
ID17060302CL045_03	Wounded Doe Creek - source to mouth	4.99	MILES
ID17060302CL046_02	Rhoda Creek - source to Wounded Doe Creek	32.32	MILES
ID17060302CL046_02L	Two Lakes	22.73	ACRES
ID17060302CL046_03	Rhoda Creek - source to Wounded Doe Creek	4.88	MILES
ID17060302CL047_02	Lizard Creek - Lizard Lakes to mouth	7.36	MILES
ID17060302CL048_02	Meeker Creek - source to mouth	9.46	MILES
ID17060302CL049_02	Three Links Creek - source to mouth	40.57	MILES
ID17060302CL049_03	Three Links Creek - source to mouth	10.18	MILES
ID17060302CL049_04	Three Links Creek - source to mouth	4.19	MILES

17060303 Lochsa

ID17060303CL007_02	Old Man Creek - source to mouth	43.08	MILES
ID17060303CL007_02L	Old Man Lakes	77.18	ACRES

ID17060303CL010_02L	Rock Creek Lakes	19.58	ACRES
ID17060303CL010_03	Boulder Creek - source to mouth	4.48	MILES
ID17060303CL015_02	Sponge Creek - source to Fish Lake Creek	22.38	MILES
ID17060303CL016_02	Fish Lake Creek - source to mouth	23.74	MILES
ID17060303CL016_02L	Fish Lake	53.12	ACRES
ID17060303CL018_02	Warm Springs Creek - source to Wind Lakes Creek	23.45	MILES
ID17060303CL019_02	Wind Lakes Creek - source to mouth	17.01	MILES
ID17060303CL019_02L	Wind Lakes	37.47	ACRES
ID17060303CL019_03	Wind Lakes Creek - source to mouth	4.83	MILES
ID17060303CL027_03	Big Sand Creek - Hidden Creek to mouth	7.77	MILES
ID17060303CL029_02	Big Sand Creek - source to Hidden Creek	23.2	MILES
ID17060303CL030_02	Hidden Creek - source to mouth	13.8	MILES
ID17060303CL030_02L	Hidden Lake (Hidden Creek to source)	103.15	ACRES
ID17060303CL030_03	Hidden Creek - source to mouth	3.47	MILES
ID17060303CL031_02	Big Flat Creek - source to mouth	10.59	MILES
ID17060303CL032_02	Storm Creek - source to mouth	42.03	MILES
ID17060303CL039_02	Hopeful Creek - source to mouth	12.36	MILES
ID17060303CL051_02	Bald Mountain Creek - source to mouth	2.34	MILES
ID17060303CL055_02	Obia Creek - source to mouth	12.14	MILES
ID17060303CL056_02	Hungery Creek - source to Obia Creek	8.66	MILES

17060305 South Fork Clearwater

ID17060305CL015_02	Gospel Creek - source to mouth	19.35	MILES
ID17060305CL015_02L	Moores and Middle Knob Lakes	63.11	ACRES
ID17060305CL016_02	West Fork Gospel Creek - source to mouth	5.93	MILES
ID17060305CL016_02L	Gospel Lakes	10.47	ACRES
ID17060305CL018_02	Johns Creek - source to Moores Creek	17.66	MILES
ID17060305CL018_03	Johns Creek - source to Moores Creek	3.6	MILES
ID17060305CL019_02	Moores Creek - source to mouth	8.76	MILES
ID17060305CL020_02	Square Mountain Creek - source to mouth	5.04	MILES
ID17060305CL021_02	Hagen Creek - source to mouth	11.26	MILES

17060307 Upper North Fork Clearwater

ID17060307CL024_02	Kelly Creek - confluence of North and Middle Fork Kelly Cree	42.21	MILES
ID17060307CL024_03	Kelly Creek - confluence of North and Middle Fork Kelly Cree	8.36	MILES
ID17060307CL024_04	Kelly Creek - confluence of North and Middle Fork Kelly Cree	3.16	MILES
ID17060307CL025_02	South Fork Kelly Creek - source to mouth	13	MILES
ID17060307CL026_02	Middle Fork Kelly Creek - source to mouth	15.36	MILES
ID17060307CL027_02	North Fork Kelly Creek - source to mouth	9.27	MILES
ID17060307CL047_03	Skull Creek - source to Collins Creek	4.16	MILES

17060308 Lower North Fork Clearwater

ID17060308CL010_02	Isabella Creek - headwaters to Elmer/Jug Creek	3.14	MILES
ID17060308CL012_05	Little North Fork Clearwater R.-Spotted Louis C. to Foehl C.	2.9	MILES
ID17060308CL013_02	Sawtooth Creek - source to mouth	26.28	MILES
ID17060308CL013_03	Sawtooth Creek - source to mouth	5.43	MILES

Salmon

17060101 Hells Canyon

ID17060101SL004_02L	Unnamed lakes in Six Lake Basin	22.84	ACRES
ID17060101SL006_02	Granite and Devils Farm Creeks - 1st and 2nd order	18.58	MILES
ID17060101SL006_02L	Emerald Lake	30.47	ACRES
ID17060101SL009_02	Sheep Creek - confluence of West and East Fork Sheep Cree	11.77	MILES
ID17060101SL010_02	West Fork Sheep Creek - source to mouth	6.16	MILES
ID17060101SL011_02	East Fork Sheep Creek - source to mouth	5.24	MILES
ID17060101SL012_02	Clarks Fork - source to mouth	13.39	MILES

17060201 Upper Salmon

ID17060201SL067_02	Redfish Lake Creek - source to Redfish Lake	14.39	MILES
ID17060201SL067_02L	Kathryn - Cramer-Alpine Lakes	101.75	ACRES
ID17060201SL080_02	Alpine Creek - source to mouth	10.32	MILES
ID17060201SL080_02L	Unnamed Lakes - Alpine Creek (Sawtooth Wilderness)	105.85	ACRES
ID17060201SL095_02	Warm Springs Creek - Pigtail Creek to Swimm Creek	36.4	MILES
ID17060201SL095_03	Warm Springs Creek - Pigtail Creek to Swimm Creek	4.83	MILES
ID17060201SL096_02	Pigtail Creek - source to mouth	16.12	MILES
ID17060201SL097_02	Warm Springs Creek - source to Pigtail Creek	16.58	MILES
ID17060201SL097_03	Warm Springs Creek - source to Pigtail Creek	3.75	MILES
ID17060201SL098_02	Swimm Creek - source to mouth	3.54	MILES
ID17060201SL098_02L	Swimm Lake (Swim Creek)	17.6	ACRES
ID17060201SL107_02	Germania Creek - Chamberlain Creek to mouth	7.17	MILES
ID17060201SL108_02	Chamberlain Creek - source to mouth	8.67	MILES
ID17060201SL108_02L	Chamberlain Basin Lakes	30.46	ACRES
ID17060201SL109_03	Germania Creek - source to Chamberlain Creek	5.6	MILES
ID17060201SL112_02	South Fork East Fork Salmon River - source to mouth	24.83	MILES
ID17060201SL112_03	South Fork East Fork Salmon River - source to mouth	2.04	MILES
ID17060201SL113_02	Ibex Creek - source to mouth	3.79	MILES

17060204 Lemhi

ID17060204SL018_02	Wright Creek - source to mouth	4.18	MILES
ID17060204SL021_02	Hayden Creek - source to West Fork Hayden Creek	6.05	MILES
ID17060204SL022_02	West Fork Hayden Creek - source to mouth	8.4	MILES

ID17060204SL022_03	West Fork Hayden Creek - source to mouth	0.62	MILES
ID17060204SL034_02	Rocky Creek - source to mouth	3.95	MILES
ID17060204SL035_02	Big Timber Creek - source to Rocky Creek	25.05	MILES
ID17060204SL035_03	Big Timber Creek - source to Rocky Creek	2.73	MILES

17060205 Upper Middle Fork Salmon

ID17060205SL001_01L	Iris Lakes	6.27	ACRES
ID17060205SL001_02	MF Salmon River - 1st and 2nd order above Loon Creek	194.53	MILES
ID17060205SL001_02L	Finger Lakes	7.51	ACRES
ID17060205SL001_03	Cougar and Fall Creeks - 3rd order sections	5.5	MILES
ID17060205SL001_06	Middle Fork Salmon River - Marsh Creek to Loon Creek	59.34	MILES
ID17060205SL002_03	Marble and Little Cottonwood Creeks - 3rd order	4.16	MILES
ID17060205SL002_04	Marble Creek - 4th order (Little Cottonwood Creek to mouth)	15.86	MILES
ID17060205SL003_02	Trail Creek - 1st and 2nd order	28.3	MILES
ID17060205SL003_03	Trail and Poee Creeks - 3rd order	6.6	MILES
ID17060205SL004_02	Big Cottonwood Creek - entire drainage	9.07	MILES
ID17060205SL005_02	Dynamite Creek - 1st and 2nd order	19.41	MILES
ID17060205SL005_03	Dynamite Creek - 3rd order	2.26	MILES
ID17060205SL006_02	Indian Creek - 1st and 2nd order	91.78	MILES
ID17060205SL006_02L	Cultens Creek - unnamed headwater lake	7.1	ACRES
ID17060205SL006_03	Indian Creek - 3rd order (Big Chief Creek to mouth)	14.41	MILES
ID17060205SL007_03	Pistol, Forty-five, and Little Pistol Creeks - 3rd order	21.35	MILES
ID17060205SL007_04	Pistol Creek - 4th order (Forty-five Creek to mouth)	4.87	MILES
ID17060205SL008_03	Elkhorn Creek - 3rd order (NF Elkhorn Creek to mouth)	1.48	MILES
ID17060205SL009_03	Sulphur and Honeymoon Creeks - 3rd order	1.81	MILES
ID17060205SL009_04	Sulphur Creek - 4th order (Honeymoon Creek to mouth)	11.11	MILES
ID17060205SL016_02L	Upper Lost Lakes	10.98	ACRES
ID17060205SL033_01L	Soldier Lakes	26.5	ACRES
ID17060205SL033_02	Soldier Creek - source to mouth	20.51	MILES
ID17060205SL033_02L	Cutthroat Lake	6.77	ACRES
ID17060205SL033_03	Soldier Creek - source to mouth	5.43	MILES
ID17060205SL035_02	Rapid River - Bell Creek to mouth	14.04	MILES
ID17060205SL035_04	Rapid River - Bell Creek to mouth	5.71	MILES
ID17060205SL036_02	Bell Creek - source to mouth	5.06	MILES
ID17060205SL037_04	Rapid River - Lucinda Creek to Bell Creek	2.21	MILES
ID17060205SL044_02	Sheep Creek - confluence of North and South Fork Sheep Cre	1.01	MILES
ID17060205SL044_03	Sheep Creek - confluence of North and South Fork Sheep Cre	2.02	MILES
ID17060205SL045_02	South Fork Sheep Creek - source to mouth	6.56	MILES
ID17060205SL046_02	North Fork Sheep Creek - source to mouth	4.37	MILES
ID17060205SL047_02	Little Loon Creek - source to mouth	53.54	MILES

ID17060205SL047_03	Little Loon Creek - source to mouth	7.03	MILES
ID17060205SL048_05	Loon Creek - Cabin Creek to mouth	11.19	MILES
ID17060205SL049_05	Loon Creek - Warm Springs Creek to Cabin Creek	3.42	MILES
ID17060205SL050_02	Loon Creek - Cottonwood Creek to Warm Springs Creek	4.51	MILES
ID17060205SL050_04	Loon Creek - Cottonwood Creek to Warm Springs Creek	2.6	MILES
ID17060205SL051_02	Loon Creek - Shell Creek to Cottonwood Creek	1.07	MILES
ID17060205SL051_04	Loon Creek - Shell Creek to Cottonwood Creek	1.68	MILES
ID17060205SL052_02	Shell Creek - source to mouth	4.43	MILES
ID17060205SL059_02	Loon Creek - source to Pioneer Creek	18.67	MILES
ID17060205SL059_02L	Horseshoe Lake (Loon Creek)	22.43	ACRES
ID17060205SL059_03	Loon Creek - source to Pioneer Creek	2.63	MILES
ID17060205SL060_03	Pioneer Creek - source to mouth	2.32	MILES
ID17060205SL064_02	East Fork Mayfield Creek - source to mouth	31.51	MILES
ID17060205SL064_03	East Fork Mayfield Creek - source to mouth	8.65	MILES
ID17060205SL065_02	Cottonwood Creek - source to mouth	18.42	MILES
ID17060205SL065_03	Cottonwood Creek - source to mouth	1.82	MILES
ID17060205SL066_02	South Fork Cottonwood Creek - source to mouth	7.29	MILES
ID17060205SL067_04	Warm Springs Creek - Trapper Creek to mouth	11.02	MILES
ID17060205SL068_02	Trapper Creek - source to mouth	28.41	MILES
ID17060205SL068_03	Trapper Creek - source to mouth	1.5	MILES
ID17060205SL069_03	Warm Springs Creek - source to Trapper Creek	3.2	MILES
ID17060205SL070_02	Cabin Creek - source to mouth	18.01	MILES

17060206 Lower Middle Fork Salmon

ID17060206SL002_02	Papoose Creek - 1st and 2nd order	28.93	MILES
ID17060206SL003_02L	Jacobs Ladder and Belvidere Creeks - unnamed headwater la	10.32	ACRES
ID17060206SL003_05	Big Creek - 5th order (Monumental Creek to mouth)	23.58	MILES
ID17060206SL004_02	Cabin Creek - 1st and 2nd order	26.55	MILES
ID17060206SL004_03	Cabin Creek - 3rd order (Cow Creek to mouth)	1.28	MILES
ID17060206SL005_02	Cave Creek - 1st and 2nd order	14.99	MILES
ID17060206SL005_03	Cave Creek - 3rd order (West Fork Cave Creek to mouth)	2.9	MILES
ID17060206SL006_02	Crooked Creek - 1st and 2nd order	31.23	MILES
ID17060206SL006_03	Crooked Creek - 3rd order (West Fork Crooked Creek to mout	6.9	MILES
ID17060206SL007_02	Big Ramey Creek - 1st and 2nd order	33.97	MILES
ID17060206SL007_03	Big Ramey Creek - 3rd order (West Fork to mouth)	3.36	MILES
ID17060206SL008_02	Beaver Creek - 1st and 2nd order	35.53	MILES
ID17060206SL008_03	Beaver Creek - 3rd order (West Fork to Big Creek)	8.25	MILES
ID17060206SL011_02	Little Marble Creek - entire watershed	13.92	MILES
ID17060206SL012_03L	Roosevelt Lake	7.01	ACRES
ID17060206SL012_04	Monumental Creek - 4th order (West Fork to mouth)	14.87	MILES

ID17060206SL013_02	Snowslide Creek - 1st and 2nd order	19.66	MILES
ID17060206SL013_02L	Beehive Creek - unnamed headwater lake	7.68	ACRES
ID17060206SL013_03	Snowslide Creek - 3rd order (Beehive Creek to mouth)	3.01	MILES
ID17060206SL014_02	West Fork Monumental Creek - 1st and 2nd order	20.28	MILES
ID17060206SL014_03	West Fork Monumental Creek - 3rd order	6.49	MILES
ID17060206SL015_02	Rush Creek - 1st and 2nd order except Two Point Creek	81.22	MILES
ID17060206SL015_03	Rush and Corner Creeks - 3rd order	3.02	MILES
ID17060206SL015_04	Rush Creek - 4th order (Corner Creek to mouth)	12.65	MILES
ID17060206SL016_02	Two Point Creek - entire drainage	4.91	MILES
ID17060206SL019_02	Sheep Creek - 1st and 2nd order	25.02	MILES
ID17060206SL020_02	Camas Creek - Yellowjacket Creek to mouth	16.56	MILES
ID17060206SL021_02	Camas Creek - Forge Creek to Yellowjacket Creek	25.13	MILES
ID17060206SL024_01L	West Fork Lakes	14.35	ACRES
ID17060206SL024_02	West Fork Camas Creek - source to mouth	44.5	MILES
ID17060206SL029_02	South Fork Camas Creek - source to mouth	21.61	MILES
ID17060206SL029_03	South Fork Camas Creek - source to mouth	2.18	MILES
ID17060206SL030_03	Camas Creek - source to South Fork Camas Creek	3.77	MILES
ID17060206SL037_02	Yellowjacket Creek - Jenny Creek to mouth	6.56	MILES
ID17060206SL037_03	Yellowjacket Creek - Jenny Creek to mouth	4.32	MILES
ID17060206SL045_02	Jenny Creek - source to mouth	2.01	MILES
ID17060206SL047_02	Waterfall Creek - source to mouth	22.85	MILES
ID17060206SL047_02L	Terrace Lakes	7.96	ACRES
ID17060206SL049_02	Roaring Creek - source to mouth	8.75	MILES

17060207 Middle Salmon-Chamberlain

ID17060207SL009_02	Fivemile Creek - source to mouth	27.61	MILES
ID17060207SL014_02	Richardson Creek - source to mouth	14.51	MILES
ID17060207SL019_02	Chamberlain Creek - McCalla Creek to mouth	4.28	MILES
ID17060207SL020_02	Chamberlain Creek - Game Creek to McCalla Creek	35.24	MILES
ID17060207SL020_04	Chamberlain Creek - Game Creek to McCalla Creek	11.94	MILES
ID17060207SL021_02	Queen Creek - source to mouth	8.93	MILES
ID17060207SL022_02	Game Creek - source to mouth	11.05	MILES
ID17060207SL022_03	West Fork Chamberlain Creek - 3rd Order	2.19	MILES
ID17060207SL023_02	West Fork Game Creek - source to mouth	11.86	MILES
ID17060207SL024_02	Chamberlain Creek - 1st and 2nd order tributaries	26.59	MILES
ID17060207SL024_03	Chamberlain Creek - confluence of Rim and South Fork Cham	5.55	MILES
ID17060207SL024_04	Chamberlain Creek - 4th Order	5.49	MILES
ID17060207SL025_02	Flossie Creek - source to mouth	7.75	MILES
ID17060207SL026_02	Rim Creek - source to mouth	5.25	MILES
ID17060207SL027_02	South Fork Chamberlain Creek - source to mouth	5.75	MILES

ID17060207SL028_02	Moose Creek - source to mouth	12.68	MILES
ID17060207SL028_03	Moose Creek - source to mouth	1.86	MILES
ID17060207SL029_02	Lodgepole Creek - source to mouth	19.39	MILES
ID17060207SL029_03	Lodgepole Creek - source to mouth	3.56	MILES
ID17060207SL030_02	McCalla Creek - source to mouth	35.91	MILES
ID17060207SL030_03	McCalla Creek - source to mouth	8.78	MILES
ID17060207SL030_04	McCalla Creek - source to mouth	2.79	MILES
ID17060207SL031_02	Whimstick Creek - 1st and 2nd order tribs	43.62	MILES
ID17060207SL031_03	Whimstick Creek - 3rd Order	7.46	MILES
ID17060207SL032_02	Disappointment Creek - source to mouth	11.47	MILES
ID17060207SL032_03	Disappointment Creek - source to mouth	4.17	MILES
ID17060207SL033_02	Starvation Creek - source to mouth	7.25	MILES
ID17060207SL034_02	Hungry Creek - source to mouth	3.83	MILES
ID17060207SL035_02	Cottonwood Creek - source to mouth	44.15	MILES
ID17060207SL036_02	Peak Creek - source to mouth	9.17	MILES
ID17060207SL041_02	Horse Creek - Little Horse Creek to mouth	19.98	MILES
ID17060207SL045_03	East Fork Reynolds Creek - source to mouth	1.48	MILES
ID17060207SL046_02	Reynolds Creek - source to mouth	4.5	MILES
ID17060207SL047_02	West Horse Creek - source to mouth	19.11	MILES
ID17060207SL049_02	Harrington Creek - source to mouth	16.86	MILES
ID17060207SL050_02	Sabe Creek - Hamilton Creek to mouth	18.3	MILES
ID17060207SL051_02	Hamilton Creek - source to mouth	36.33	MILES
ID17060207SL051_03	Hamilton Creek - source to mouth	7.17	MILES
ID17060207SL052_03	Sabe Creek - source to Hamilton Creek	5.16	MILES
ID17060207SL053_02	Center Creek - source to mouth	3.82	MILES
ID17060207SL055_03	Bargamin Creek - source to mouth	5.25	MILES
ID17060207SL057_02	Prospector Creek - source to mouth	3.79	MILES
ID17060207SL058_02	Cache Creek - source to mouth	9.73	MILES
ID17060207SL059_02	Salt Creek - source to mouth	8.18	MILES
ID17060207SL060_02	Rainey Creek - source to mouth	6.86	MILES
ID17060207SL067_02	Crooked Creek - Lake Creek to mouth	22.12	MILES
ID17060207SL068_04	Crooked Creek - Big Creek to Lake Creek	1.55	MILES
ID17060207SL070_03	Lake Creek - source to mouth	3.43	MILES
ID17060207SL070_04	Lake Creek - source to mouth	5.9	MILES
ID17060207SL071_02	Arlington Creek - source to mouth	3.7	MILES
ID17060207SL072_02	Bull Creek - 1st and 2nd order tribs	12.68	MILES
ID17060207SL075_02	Long Meadow Creek - source to mouth	8.77	MILES
ID17060207SL076_03	Wind River - source to mouth	6.7	MILES
ID17060207SL076_04	Wind River - Meadow Creek to Salmon River	2.56	MILES

17060208 South Fork Salmon

ID17060208SL008_02	Loon Creek - entire drainage	17.84	MILES
ID17060208SL021_02	Fourmile Creek - 1st and 2nd order	20.21	MILES
ID17060208SL030_02	Tamarack Creek - 1st and 2nd order	15.53	MILES
ID17060208SL035_02	Porphyry Creek - 1st and 2nd order	34.17	MILES
ID17060208SL035_03	Porphyry and Wolf Fang Creeks - 3rd order	4.09	MILES

17060209 Lower Salmon

ID17060209SL020_02L	Piper Lakes	10.04	ACRES

17060210 Little Salmon

ID17060210SL002_01L	Satan Lake	4.96	ACRES
ID17060210SL002_02L	Twin Lakes	6.37	ACRES
ID17060210SL003_0L	Mirror Lake	8.11	ACRES
ID17060210SL012_02L	Twin Lakes	40.53	ACRES
ID17060210SL015_02L	Corral Creek Lakes	44.63	ACRES
ID17060210SL016_02L	Buck and Elk Lakes	23.33	ACRES

Southwest

17050104 Upper Owyhee

ID17050104SW027_04	Dickshooter Creek - 4th order	0.04	MILES

17050105 South Fork Owyhee

ID17050105SW001_03	Unnamed 3rd order tributary to SF Owyhee River	1.25	MILES
ID17050105SW001_04	unnamed tributary to South Fork Owyhee River	1.34	MILES

17050107 Middle Owyhee

ID17050107SW001_03	Dukes Creek - 3rd order	1.21	MILES

17050111 North And Middle Fork Boise

ID17050111SW001_00L	Lake Creek - unnamed headwater lake	8.26	ACRES
ID17050111SW001_01L	Spangle Lakes	56.93	ACRES
ID17050111SW001_02L	Leggit Lake	18.91	ACRES
ID17050111SW001_03L	Lynx Creek Lakes	8.94	ACRES
ID17050111SW001_0L	Little Spangle Lake and Flytrip Creek headwater lakes	43.35	ACRES
ID17050111SW001_LL	Suprise Lakes	6.71	ACRES
ID17050111SW006_01L	Queens River - unnamed headwater lake	7.4	ACRES
ID17050111SW007_01L	Scenic Lake	15.06	ACRES
ID17050111SW007_02L	Browns Lake	22.73	ACRES
ID17050111SW010_02L	McKay Creek Lake	2.03	ACRES
ID17050111SW011_01L	Alidade Lake	6.05	ACRES

ID17050111SW011_02L	Johnson, Pats, Azure, Rock Island and Arrowhead Lakes	39.46	ACRES
ID17050111SW012_02L	Jennie Lake	4.77	ACRES

17050112 Boise-Mores

ID17050112SW005_03	Sheep and SF Sheep Creeks - 3rd order	6.95	MILES

17050113 South Fork Boise

ID17050113SW019_03	Big Smoky Creek - 3rd order	9.44	MILES
ID17050113SW023_02L	Perkins Lake	10.11	ACRES
ID17050113SW028_01L	Rainbow Lakes, Heart Lake, Big Lookout Lake	33.14	ACRES

17050120 South Fork Payette

ID17050120SW005_00L	Benedict, Everly and Three Island Lakes	33.55	ACRES
ID17050120SW005_02L	Edna, Vernon, and Virginia Lakes	108.36	ACRES
ID17050120SW005_03L	Elk Lake	21.21	ACRES
ID17050120SW005_04L	Trail Creek Lakes	14.39	ACRES
ID17050120SW005_0L	Ardeth Lake	79.6	ACRES
ID17050120SW005_LL	Pinchot Creek unnamed headwater lakes	24.36	ACRES
ID17050120SW006_02	Goat Creek - entire drainage	13.48	MILES
ID17050120SW006_02L	Blue Rock, Packrat, and Oreamnos Lakes	31.06	ACRES
ID17050120SW007_01L	North Fork Baron Creek - unnamed headwater lakes	26.62	ACRES
ID17050120SW007_02	Baron and NF Baron Creeks - 1st and 2nd order	19.63	MILES
ID17050120SW007_02L	Baron Lakes	47.39	ACRES
ID17050120SW010_01L	Cat Lakes	7.08	ACRES
ID17050120SW011_02L	Red Mountain Lakes	13.3	ACRES
ID17050120SW013_02L	Unnamed lakes on south side of Red Mountain	13.15	ACRES

17050121 Middle Fork Payette

ID17050121SW008_03	Peace Creek - 3rd order (Valley Creek to mouth)	1.13	MILES
ID17050121SW009_03	Bull Creek - 3rd order (Sixteen-to-One Creek to mouth)	0.74	MILES

17050123 North Fork Payette

ID17050123SW010_01L	Fogg Lake	3.05	ACRES
ID17050123SW011_00L	Boulder Lake	78.2	ACRES
ID17050123SW017_02L	Blackwell Lake	33.54	ACRES
ID17050123SW018_02L	Brush Lake	165.15	ACRES
ID17050123SW020_02L	Twentymile Lakes	16.22	ACRES
ID17050123SW021_01L	Deep and Trail Lakes	40.38	ACRES
ID17050123SW022_02L	Horton Lake	5.71	ACRES

Upper Snake

17040104 Palisades

ID17040104SK012_03	North Fork Bear Creek - source to mouth	2.66	MILES

17040203 Lower Henrys

ID17040203SK011_04	Boundary Creek - Idaho/Wyoming border (T12N, R46E, Sec. 0	5.66	MILES

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Appendix D. Category 2—Waters of the State Attaining Some Standards

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2010 Integrated Report: Category 2: Waters Attaining Some Standards

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Bear River

16010102 Central Bear

ID16010102BR007_02	Salt Creek - source to Idaho/Wyoming border	1.78	MILES
ID16010102BR007_02a	Giraffe Creek - headwaters to WY line	5.28	MILES

16010201 Bear Lake

ID16010201BR002_02b	Wood Canyon Creek - headwaters to groundwater	7.24	MILES
ID16010201BR006_02a	Beaver Creek	3.74	MILES
ID16010201BR006_02b	Fern Creek	2.15	MILES
ID16010201BR010_02a	Copenhagen Creek	12.32	MILES
ID16010201BR010_02b	Emigration Creek - HW to North Creek	7.54	MILES
ID16010201BR010_02c	Meadow Creek	3.15	MILES
ID16010201BR010_02d	upper North Creek - HW to Snyder Cr confluence	17.08	MILES
ID16010201BR010_03	North Creek - Emigration Creek to Liberty Creek	6.12	MILES
ID16010201BR011_02a	Mill Creek - HW to Liberty Creek	6.04	MILES
ID16010201BR014_02a	Bloomington Creek Forks	17.29	MILES
ID16010201BR014_03	lower Bloomington Creek	13.43	MILES
ID16010201BR014_03a	Bloomington Creek	2.56	MILES
ID16010201BR019_02a	Fish Haven Creek	13.29	MILES
ID16010201BR020_02c	Telephone Draw	2.76	MILES

16010202 Middle Bear

ID16010202BR003_02c	Sugar Creek	6.74	MILES
ID16010202BR004_02	Cub River - source to Sugar Creek	30.2	MILES
ID16010202BR004_02a	Foster Creek	5.53	MILES
ID16010202BR004_03	Cub River - 2 order source to Sugar Creek	7.35	MILES
ID16010202BR005_02a	Worm Creek (upper)	9.25	MILES
ID16010202BR007_02b	Mink Creek	1.76	MILES
ID16010202BR014_02a	Divide Creek	4.32	MILES
ID16010202BR014_02d	Jacobson Creek	7.59	MILES
ID16010202BR014_03	Cottonwood Creek - source to Oneida Narrows Reservoir	5.84	MILES
ID16010202BR017_02a	Oxford Creek	3.5	MILES
ID16010202BR018_02a	Gooseberry Creek	14.38	MILES
ID16010202BR018_03a	Stockton Creek	6.07	MILES
ID16010202BR020_02b	Dry Canyon	14.12	MILES

16010203 Little Bear-Logan

ID16010203BR001_02	Beaver Creek - source to Idaho/Utah border	12.06	MILES
ID16010203BR002_02c	Boss Canyon	2.1	MILES

16010204 Lower Bear-Malad

ID16010204BR001_02a	Two Mile Canyon	7.31	MILES
ID16010204BR002_02b	New Canyon Creek	12.8	MILES
ID16010204BR002_02d	Devil Creek	26.29	MILES
ID16010204BR006_02b	Second Creek	5.19	MILES

Clearwater

17060108 Palouse

ID17060108CL016_04	Palouse River - Strychnine Creek to Hatter Creek	16.13	MILES
ID17060108CL017_02	Flat Creek - source to mouth	21.54	MILES
ID17060108CL018_02	Palouse River - source to Strychnine Creek	26.25	MILES
ID17060108CL019_02	Little Sand Creek - source to mouth	10.52	MILES
ID17060108CL019_03	Little Sand Creek - source to mouth	2.21	MILES
ID17060108CL020_02	Big Sand Creek - source to mouth	13.72	MILES
ID17060108CL021_02	North Fork Palouse River - source to mouth	13.98	MILES
ID17060108CL022_02	Strychnine Creek - source to mouth	12.57	MILES
ID17060108CL022_03	Strychnine Creek - source to mouth	2.04	MILES
ID17060108CL023_03	Meadow Creek - East Fork Meadow Creek to mouth	2.76	MILES
ID17060108CL024_02	East Fork Meadow Creek - source to mouth	19.88	MILES
ID17060108CL025_02	Meadow Creek - source to East Fork Meadow Creek	16.22	MILES
ID17060108CL026_02	White Pine Creek - source to mouth	3.88	MILES
ID17060108CL028_02	Jerome Creek - source to mouth	6.55	MILES

17060302 Lower Selway

ID17060302CL001_02	Selway River - O'Hara Creek to mouth	21.96	MILES
ID17060302CL002_02	Goddard Creek - source to mouth	16.52	MILES
ID17060302CL003_02	O'Hara Creek - confluence of West and East Fork O'Hara Cre	43.56	MILES
ID17060302CL003_03	O'Hara Creek - confluence of West and East Fork O'Hara Cre	6.36	MILES
ID17060302CL003_04	O'Hara Creek - confluence of Hamby Fork to mouth	4.42	MILES
ID17060302CL006_02	Twentythree, Nineteen Mile Creeks and tribs.	27.14	MILES
ID17060302CL006_02a	Island Creek - source to mouth	6.49	MILES
ID17060302CL006_02b	Slide Creek - source to mouth	4.16	MILES
ID17060302CL007_03	Falls Creek - source to mouth	4.34	MILES
ID17060302CL008_04	Meadow Creek - Buck Lake Creek to mouth	10.31	MILES
ID17060302CL012_04	Meadow Creek - East Fork Meadow Creek to Buck Lake Cree	12.59	MILES
ID17060302CL013_02	Butte Creek - source to mouth	9.98	MILES

ID17060302CL014_03	Sable Creek - source to mouth	3.55	MILES
ID17060302CL015_02	Simmons Creek - source to mouth	10.89	MILES
ID17060302CL022_02	Selway River - Moose Creek to Meadow Creek	98.11	MILES
ID17060302CL050_04	Gedney Creek - West Fork Gedney Creek to mouth	3.48	MILES
ID17060302CL053_02	Glover Creek - source to mouth	11.69	MILES
ID17060302CL054_02	Boyd Creek - source to mouth	8.84	MILES
ID17060302CL055_02	Rackliff Creek - source to mouth	9.39	MILES

17060303 Lochsa

ID17060303CL004_03	Coolwater Creek - source to mouth	2.4	MILES
ID17060303CL006_03	Split Creek - source to mouth	1.08	MILES
ID17060303CL009_02	Holly Creek - and tributaries	66.11	MILES
ID17060303CL011_02	Stanley Creek - source to mouth	14.69	MILES
ID17060303CL012_02	Eagle Mountain Creek - source to mouth	7.11	MILES
ID17060303CL013_02	Lochsa River- Warm Springs Creek to Indian Grave Creek	30.22	MILES
ID17060303CL017_03	Warm Springs Creek - Wind Lakes Creek to mouth	6.15	MILES
ID17060303CL020_02	Robin Creek - and tributaries	13.56	MILES
ID17060303CL023_02	Walton Creek - source to mouth	12.57	MILES
ID17060303CL026_02	Colt Creek - source to mouth	23.61	MILES
ID17060303CL027_02	Hoodoo, Muleshoe, Bridge Creeks	20.6	MILES
ID17060303CL028_02	Swamp Creek - source to mouth	13.91	MILES
ID17060303CL035_02	Pack Creek and tributaries	30.68	MILES
ID17060303CL035_03	Brushy Fork - Spruce Creek to mouth	5.75	MILES
ID17060303CL036_02	Spruce Creek - source to mouth	19.11	MILES
ID17060303CL038_02	Haskell Creek - and tributaries	29.96	MILES
ID17060303CL038_03	Crooked Fork - source to Brushy Fork	4.97	MILES
ID17060303CL039_03	Hopeful Creek - source to mouth	2.18	MILES
ID17060303CL040_02	Fox Creek - source to mouth, and tributaries	22.64	MILES
ID17060303CL040_03	Boulder Creek - source to mouth	3.31	MILES
ID17060303CL041_02	Papoose Creek - source to mouth	17.74	MILES
ID17060303CL041_03	Papoose Creek - source to mouth	1.89	MILES
ID17060303CL042_02	Parachute Creek - source to mouth	5.45	MILES
ID17060303CL043_02	Wendover Creek - source to mouth	5.67	MILES
ID17060303CL044_02	Badger Creek - source to mouth	5.18	MILES
ID17060303CL045_03	Squaw Creek - source to mouth	3.66	MILES
ID17060303CL047_02	Doe Creek - source to mouth	8.98	MILES
ID17060303CL048_02	Postoffice Creek - source to mouth	20.07	MILES
ID17060303CL048_03	Postoffice Creek - 3rd order segment	0.69	MILES
ID17060303CL049_03	Weir Creek - 3rd order segment	1.86	MILES
ID17060303CL050_02	Indian Grave Creek - source to mouth	15.4	MILES

ID17060303CL051_03	Bald Mountain Creek - source to mouth	3.14	MILES
ID17060303CL058_02	Bimerick Creek - source to mouth	15.42	MILES
ID17060303CL059_03	Deadman Creek - East Fork Deadman Creek to mouth	2.17	MILES
ID17060303CL062_02	Canyon Creek - source to mouth	26.43	MILES
ID17060303CL065_02	Pete King Creek - source to Walde Creek	11.91	MILES

17060304 Middle Fork Clearwater

ID17060304CL001_02	Middle Fork Clearwater River - confluence of Lochsa	89.36	MILES
ID17060304CL002_04	Clear Creek - South Fork Clear Creek to mouth	11.71	MILES
ID17060304CL006_02	Clear Creek - source to South Fork Clear Creek	8.79	MILES
ID17060304CL006_04	Clear Creek - source to South Fork Clear Creek	2.12	MILES
ID17060304CL007_02	Middle Fork Clear Creek - source to mouth	11.4	MILES
ID17060304CL008_02	Browns Spring Creek - source to mouth	7.55	MILES
ID17060304CL009_02	Pine Knob Creek - source to mouth	5.33	MILES
ID17060304CL010_02	Lodge Creek - source to mouth	5.41	MILES
ID17060304CL011_02	Maggie Creek - source to mouth	27.74	MILES

17060305 South Fork Clearwater

ID17060305CL052L_00	Lucas Lake	1.028	ACRES

17060306 Clearwater

ID17060306CL005_04	Sweetwater Creek - Webb Creek to mouth	3.69	MILES
ID17060306CL008_03	Lapwai Creek - Winchester Lake to Sweetwater Creek	16.48	MILES
ID17060306CL008_04	Lapwai Creek - Winchester Lake to Sweetwater Creek	3.6	MILES
ID17060306CL011_03	Mission Creek - source to mouth	18.09	MILES
ID17060306CL014_03	Cottonwood Creek - source to mouth	13	MILES
ID17060306CL015_02	Jacks Creek - source to mouth	25.85	MILES
ID17060306CL018_04	Little Canyon Creek - confluence of Holes and Long Hollow Cr	18.56	MILES
ID17060306CL022_02	Clearwater River - confluence of South and Middle Fork Clear	105.04	MILES
ID17060306CL022_03	Clearwater River - confluence of South and Middle Fork Clear	6.36	MILES
ID17060306CL024_04	Lawyer Creek - source to mouth	37.99	MILES
ID17060306CL026_02	Lolo Creek - Yakus Creek to mouth	70.91	MILES
ID17060306CL026_04	Lolo Creek - Yakus Creek to mouth	27.7	MILES
ID17060306CL027_02	Yakus Creek - source to mouth	20.63	MILES
ID17060306CL028_02	Lolo Creek - source to Yakus Creek	37.74	MILES
ID17060306CL028_03	Lolo Creek - source to Yakus Creek	5.08	MILES
ID17060306CL028_04	Lolo Creek - source to Yakus Creek	14.04	MILES
ID17060306CL029_03	Eldorado Creek - 3rd Order	6.46	MILES
ID17060306CL030_02	Yoosa Creek - source to mouth	26.67	MILES
ID17060306CL030_03	Yoosa Creek - source to mouth	2.78	MILES

ID17060306CL039_02	Shanghai Creek - and tributaries	144.77	MILES
ID17060306CL046_02	Cedar Creek - headwaters	48.58	MILES
ID17060306CL047_02	Boulder Creek - headwaters	18.65	MILES
ID17060306CL051_02	East Fork Potlatch River - source to mouth	51.56	MILES
ID17060306CL051_03	East Fork Potlatch River - Mallory Creek to Ruby Creek	11.06	MILES
ID17060306CL052_02	Ruby Creek - headwaters	17.19	MILES
ID17060306CL057_02	East Fork Big Bear Creek - source to mouth	46.73	MILES
ID17060306CL060_03	Little Bear Creek - 3rd order main stem	9.79	MILES
ID17060306CL060_04	Little Bear Creek - 4th order main stem	4.67	MILES
ID17060306CL064_03	Little Potlatch Creek - source to mouth	10.8	MILES
ID17060306CL067_03	Hatwai Creek - 3rd Order	4.04	MILES

17060307 Upper North Fork Clearwater

ID17060307CL001_02b	Sheep Creek	6.88	MILES
ID17060307CL002_02	Deadhorse, Dead Mule Creeks and tribs	29.24	MILES
ID17060307CL002_02a	Flat Creek	9.72	MILES
ID17060307CL003_02	Moose, Lodge, Rettig, Tepee Creeks	42.62	MILES
ID17060307CL003_03	Washington Creek - source to mouth	8.87	MILES
ID17060307CL004_02	Siwash, Cave Creeks and tribs	21.59	MILES
ID17060307CL007_03	French Creek - Sylvan Creek to mouth	2.12	MILES
ID17060307CL010_02	Hemlock Creek - source to mouth	39.51	MILES
ID17060307CL011_04	Weitas Creek - Windy Creek to Hemlock Creek	10.31	MILES
ID17060307CL020_02	Lookout, Monroe Creek - source to mouth	22.47	MILES
ID17060307CL029_02	Little Moose Creek - source to mouth	21.22	MILES
ID17060307CL031_02	Moose Creek - source to Osier Creek	21.72	MILES
ID17060307CL032_02b	Pete Ott, Hidden, Fix, Stolen Creeks	22.4	MILES
ID17060307CL035_02	Long Creek - source to mouth	24.49	MILES
ID17060307CL039_02	Elizabeth Creek - source to mouth	8.85	MILES
ID17060307CL042_02	Larson Creek - source to mouth	9.01	MILES
ID17060307CL043_02	Rock Creek - source to mouth	15.88	MILES
ID17060307CL044_02b	Upper Quartz Creek and Tributaries	26.84	MILES
ID17060307CL044_03	Quartz Creek - Wolf Creek to mouth	6.22	MILES
ID17060307CL046_04	Skull Creek - Collins Creek to mouth	3.91	MILES
ID17060307CL047_02	Snow Creek and tribs	41.58	MILES
ID17060307CL047_04	Skull Creek - source to Collins Creek	5.06	MILES
ID17060307CL048_02	Collins Creek - source to mouth	33.62	MILES
ID17060307CL048_03	Collins Creek - 3rd order	5.83	MILES

17060308 Lower North Fork Clearwater

ID17060308CL009_02a	South Fork Beaver Creek - source to mouth	8.22	MILES

ID17060308CL009_02b	Bertha Creek - source to mouth	2.72	MILES
ID17060308CL009_02d	Sourdough Creek	5.69	MILES
ID17060308CL010_02a	Dog Creek - source to mouth	3.88	MILES
ID17060308CL010_02b	Goat Creek - and tributaries	15.11	MILES
ID17060308CL010_02c	Fern Creek - and tributaries	8.46	MILES
ID17060308CL017_02	Little North Fork Clearwater River - source to Rutledge Cree	11.43	MILES
ID17060308CL018_03	Little North Fork Clearwater River - source to Rutledge Cr.	5.18	MILES
ID17060308CL022_03	Glover Creek -source to mouth	2.59	MILES
ID17060308CL024_02	Isabella Creek - source to mouth	14.19	MILES
ID17060308CL030_02	Elk Creek tributaries inc. Morris, Deer, Pete Cr	20.18	MILES
ID17060308CL030_02a	West Fork Elk Creek - source to Elk Creek	3.5	MILES
ID17060308CL030_02b	Elk Creek - headwaters	16.51	MILES
ID17060308CL030_02c	Johnson Creek - source to mouth	3.28	MILES
ID17060308CL030_03	Elk Creek - source to Elk Creek Reservoir	7.58	MILES
ID17060308CL030_03L	Elk Creek Reservoir	75.67	ACRES

Panhandle

17010101 Upper Kootenai

ID17010101PN001_02	Star Creek - source to Idaho/Montana border	14	MILES
ID17010101PN002_02	North Callahan Creek - source to Idaho/Montana border	28.36	MILES
ID17010101PN002_03	North Callahan Creek - source to Idaho/Montana border	6	MILES
ID17010101PN003_03	South Callahan Creek - Glad Creek to Idaho/Montana border	1.72	MILES
ID17010101PN004_02	South Callahan Creek - source to Glad Creek	6.44	MILES
ID17010101PN005_02	Glad Creek - source to mouth	7.61	MILES
ID17010101PN005_03	Glad Creek - source to mouth	0.54	MILES
ID17010101PN006_02	Keeler Creek - source to Idaho/Montana border	2.18	MILES

17010104 Lower Kootenai

ID17010104PN005_02	Tribs to Smith Creek - Cow Creek to Kootenai R.	4.61	MILES
ID17010104PN006_02a	Beaver Creek - headwaters to Cow Creek	7.35	MILES
ID17010104PN007_02	Smith Creek - source to Cow Creek	26.39	MILES
ID17010104PN009_02	Parker Creek - upper portion, forested	22.02	MILES
ID17010104PN010_02	Trout Creek - tribs to Trout Creek	15.25	MILES
ID17010104PN012_02	Lost Creek and unnamed stream segments	5.3	MILES
ID17010104PN013_02	Tributaries to Myrtle Creek	30.77	MILES
ID17010104PN016_02	Upper Snow Creek	12.27	MILES
ID17010104PN020_02	Ruby Creek - Upper, headwaters to Gold Cr	11.98	MILES
ID17010104PN021_02	Fall Creek - upper, headwaters and tribs to Fall Cr	28.89	MILES
ID17010104PN024_02	Dodge Creek -	4.65	MILES

ID17010104PN026_02	1st & 2nd order tribs to Trail Creek - including Cone Creek	19.63	MILES
ID17010104PN028_02	Twentymile Creek - source to mouth	11.92	MILES
ID17010104PN030_02	Cow Creek - headwaters including Cabin and Brush creeks	29.17	MILES
ID17010104PN032_02	Gable Creek - source to mouth	10.77	MILES
ID17010104PN033_02	Boulder Creek - source to East Fork Boulder Creek	37.32	MILES
ID17010104PN033_03	Boulder Creek - Pinochle Creek to East Fork Boulder Creek	9.74	MILES
ID17010104PN034_02	East Fork Boulder Creek - source to mouth	18.22	MILES
ID17010104PN040_02	Mission Creek - tributaries to Mission Cr	9.95	MILES

17010105 Moyie

ID17010105PN005_02	Moyie River - Round Prairie Creek to Meadow Creek	34.65	MILES
ID17010105PN010_02	Round Prairie Creek - source to Gillon Creek	18.62	MILES

17010214 Pend Oreille Lake

ID17010214PN009L_0L	Spirit Lake	1541.93	ACRES
ID17010214PN010_02	Brickel Creek - Idaho/Washington border to mouth	27.79	MILES
ID17010214PN029_02	Strong Creek - source to mouth	4.25	MILES
ID17010214PN033_02	Rapid Lightning Creek, Upper	45.98	MILES
ID17010214PN054_02	Syringa Creek - Upper, 1st and 2nd order tribs	14.68	MILES
ID17010214PN055_03	Carr Creek - Lower	2.51	MILES
ID17010214PN057_02	Smith Creek - headwaters to Pend Oreille R	8.64	MILES
ID17010214PN059_02	Riley Creek - tributaries	11.61	MILES
ID17010214PN060_02	Manley Creek - headwaters to Riley Cr.	5.86	MILES

17010215 Priest

ID17010215PN006_02	Priest Lake	36.07	MILES
ID17010215PN008_02	Soldier Creek - source to mouth	24.59	MILES
ID17010215PN009_02	Hunt Creek - source to mouth	18.79	MILES
ID17010215PN009_03	Hunt Creek - source to mouth	1.18	MILES
ID17010215PN010_03	Indian Creek - source to mouth	3.24	MILES
ID17010215PN015_02	Caribou Creek - source to mouth	27.41	MILES
ID17010215PN015_03	Caribou Creek - source to mouth	7.65	MILES
ID17010215PN016_02	01 & 02 Tribs to Upper Priest Lake	6.34	MILES
ID17010215PN018_03	Upper Priest River - Idaho/Canadian border to mouth	18.71	MILES
ID17010215PN019_03	Hughes Fork - source to mouth	6.6	MILES
ID17010215PN019_04	Hughes Fork - source to mouth	3.33	MILES
ID17010215PN021_02	Tango Creek - source to mouth	3.26	MILES
ID17010215PN022_02	Granite Creek - Idaho/Washington border to mouth	103.73	MILES
ID17010215PN022_03	Granite Creek - Idaho/Washington border to mouth	10.44	MILES
ID17010215PN029_03	Quartz Creek - source to mouth	3.2	MILES

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17010301 Upper Coeur d Alene

ID17010301PN025_02	Downey Creek - Headwaters to mainstem Downey Creek	10.21	MILES
ID17010301PN025_03	Downey Creek - lower	2.33	MILES
ID17010301PN038_02	Skookum Creek headwaters and tributaries	7.63	MILES

17010302 South Fork Coeur d Alene

ID17010302PN003_02	Pine Creek - source to East Fork Pine Creek	31.48	MILES
ID17010302PN003_03	Pine Creek - source to East Fork Pine Creek	5.95	MILES
ID17010302PN005_02	Hunter Creek - source to mouth	6.84	MILES
ID17010302PN013_03	South Fork Coeur d'Alene River - source to Daisy Gulch	1.12	MILES
ID17010302PN019_02	West Fork Moon Creek - source to mouth	4.28	MILES

17010303 Coeur d Alene Lake

ID17010303PN005_03	Fighting Creek - source to mouth	0.64	MILES
ID17010303PN006_03	Lake Creek - Idaho/Washington border to mouth	3.92	MILES
ID17010303PN006_04	Lake Creek - Idaho/Washington border to mouth	7.35	MILES
ID17010303PN025_02	Thompson Creek	6.13	MILES
ID17010303PN027_02	Turner Creek - source to mouth	5.12	MILES
ID17010303PN032_03	Fernan Creek - Fernan Lake to mouth	0.74	MILES

17010304 St. Joe

ID17010304PN007_03	St. Maries River - Santa Creek to mouth	0.2	MILES
ID17010304PN020_02	Merry Creek - source to mouth	26.45	MILES
ID17010304PN021_02	Childs Creek - source to mouth	8.52	MILES
ID17010304PN025_02	Beaver Creek - source to mouth	11.98	MILES
ID17010304PN028_02	Bond Creek - source to mouth	27.08	MILES
ID17010304PN028_03	Bond Creek - source to mouth	5.2	MILES
ID17010304PN029_02	Hugus Creek- source to mouth	15.19	MILES
ID17010304PN031_03	Marble Creek - Hobo Creek to mouth	2.66	MILES
ID17010304PN032_02	Eagle Creek - source to mouth	11.83	MILES
ID17010304PN033_02a	Bussel Creek□Lines Creek□Norton Creek□Toles Creek	20.26	MILES
ID17010304PN033_03	Bussel Creek - source to mouth	3.8	MILES
ID17010304PN034_02	Hobo Creek - source to mouth	9.46	MILES
ID17010304PN035_03	Marble Creek - source to Hobo Creek	7.85	MILES
ID17010304PN036_02	Homestead Creek - source to mouth	12.38	MILES
ID17010304PN037_02	Daveggio Creek - source to mouth	10.31	MILES
ID17010304PN037_03	Daveggio Creek - source to mouth	1.84	MILES
ID17010304PN038_03	Boulder Creek - source to mouth	2.69	MILES
ID17010304PN039_02	Fishhook Creek - source to mouth	51.28	MILES
ID17010304PN040_02	Siwash Creek - source to mouth	9.31	MILES

ID17010304PN041_04	St. Joe River - source to North Fork St. Joe River	59.59	MILES
ID17010304PN042_02	Sisters Creek - source to mouth	48.95	MILES
ID17010304PN042_03	Sisters Creek - source to mouth	4.59	MILES
ID17010304PN043_02	Prospector Creek - source to mouth	6.76	MILES
ID17010304PN044_02	Nugget Creek - source to mouth	8.6	MILES
ID17010304PN050_02	Timber Creek - source to mouth	6.55	MILES
ID17010304PN051_02	Red Ives Creek - source to mouth	12.69	MILES
ID17010304PN055_02	Quartz Creek - source to mouth	18.25	MILES
ID17010304PN055_03	Quartz Creek - source to mouth	2.5	MILES
ID17010304PN056_02	Eagle Creek - source to mouth	12.92	MILES
ID17010304PN057_02	Bird Creek - source to mouth	15.63	MILES
ID17010304PN058_02	Skookum Creek - source to mouth	12.54	MILES
ID17010304PN059_02	North Fork St. Joe River - Loop Creek to mouth	27.8	MILES
ID17010304PN061_02	North Fork St. Joe River - source to Loop Creek	31.99	MILES
ID17010304PN061_03	North Fork St. Joe River - source to Loop Creek	7.23	MILES
ID17010304PN064_03	Trout Creek - source to mouth	5.81	MILES
ID17010304PN066_02	Reeds Gulch Creek - source to mouth	4.76	MILES
ID17010304PN067_02	Rochat Creek - source to St. Joe River	8.53	MILES

17010305 Upper Spokane

ID17010305PN012_02	Rathdrum Creek - Twin Lakes to mouth	7.36	MILES

Salmon

17060101 Hells Canyon

ID17060101SL004_02	Deep Creek - 1st and 2nd order	20.97	MILES
ID17060101SL023_02	Getta Creek - source to mouth	26.96	MILES

17060103 Lower Snake-Asotin

ID17060103SL007_02	Corral Creek - source to mouth	12.12	MILES

17060201 Upper Salmon

ID17060201SL002_03	Morgan Creek - West Creek to mouth	6.68	MILES
ID17060201SL003_02	Morgan Creek - source to West Creek	74.94	MILES
ID17060201SL003_03	Morgan Creek - source to West Creek	7.68	MILES
ID17060201SL004_02	West Creek - Blowfly Creek to mouth	8.3	MILES
ID17060201SL005_02	Blowfly Creek - source to mouth	3.11	MILES
ID17060201SL006_02	West Fork Morgan Creek - source to Blowfly Creek	7.46	MILES
ID17060201SL008_03	Darling Creek - source to mouth	4.45	MILES
ID17060201SL009_02	Challis Creek - Bear Creek to Darling Creek	19.71	MILES
ID17060201SL010_02	Eddy Creek - source to mouth	20.61	MILES

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ID17060201SL011_02	Bear Creek - source to mouth	18.14	MILES
ID17060201SL012_02	Challis Creek - source to Bear Creek	27.54	MILES
ID17060201SL012_03	Challis Creek - source to Bear Creek	3.29	MILES
ID17060201SL013_02	Mill Creek - source to mouth	24.96	MILES
ID17060201SL013_03	Mill Creek - source to mouth	9.66	MILES
ID17060201SL015_02	Garden Creek - source to mouth	45.07	MILES
ID17060201SL016_02	Salmon River - East Fork Salmon River to Garden Creek	91.4	MILES
ID17060201SL017_02	Bayhorse Creek - source to mouth	24.86	MILES
ID17060201SL017_03	Bayhorse Creek - source to mouth	5.02	MILES
ID17060201SL019_02	Salmon River - Squaw Creek to East Fork Salmon River	28.06	MILES
ID17060201SL019_05	Salmon River - Squaw Creek to East Fork Salmon River	8.17	MILES
ID17060201SL020_02	Kinnikinic Creek - source to mouth	18.46	MILES
ID17060201SL021_02	Squaw Creek - Cash Creek to mouth	18.88	MILES
ID17060201SL021_04	Squaw Creek - Cash Creek to mouth	7.79	MILES
ID17060201SL022_02	Cash Creek - source to mouth	11.54	MILES
ID17060201SL028_02	Thompson Creek - source to mouth	24.62	MILES
ID17060201SL028_03	Thompson Creek - source to mouth	8.93	MILES
ID17060201SL030_02	Buckskin Creek - source to mouth	2.85	MILES
ID17060201SL031_02	Salmon River - Yankee Fork Creek to Thompson Creek	50.15	MILES
ID17060201SL031_03	Salmon River - Yankee Fork Creek to Thompson Creek	4.02	MILES
ID17060201SL031_05	Salmon River - Yankee Fork Creek to Thompson Creek	13.85	MILES
ID17060201SL032_02	Yankee Fork Creek - Jordan Creek to mouth	20.3	MILES
ID17060201SL032_04	Yankee Fork Creek - Jordan Creek to mouth	9	MILES
ID17060201SL033_03	Ramey Creek - source to mouth	1.48	MILES
ID17060201SL034_02	Yankee Fork Creek - source to Jordan Creek	50.54	MILES
ID17060201SL034_03	Yankee Fork Creek - source to Jordan Creek	6.22	MILES
ID17060201SL034_04	Yankee Fork Creek - source to Jordan Creek	7.05	MILES
ID17060201SL035_02	Fivemile Creek - source to mouth	11.39	MILES
ID17060201SL036_02	Elevenmile Creek - source to mouth	4.19	MILES
ID17060201SL037_02	McKay Creek - source to mouth	9.02	MILES
ID17060201SL038_02	Twentymile Creek - source to mouth	3.59	MILES
ID17060201SL039_02	Tenmile Creek - source to mouth	5.14	MILES
ID17060201SL040_02	Eightmile Creek - source to mouth	19.12	MILES
ID17060201SL040_03	Eightmile Creek - source to mouth	3.52	MILES
ID17060201SL041_03	Jordan Creek - from and including Unnamed Tributary (T13N,	1.36	MILES
ID17060201SL042_03	Jordan Creek - source to Unnamed Tributary (T13N, R15E, Se	2.64	MILES
ID17060201SL047_02	Salmon River - Valley Creek to Yankee Fork Creek	39.98	MILES
ID17060201SL049_02	East Basin Creek - source to mouth	11.6	MILES
ID17060201SL050_02	Basin Creek - source to East Basin Creek	54.01	MILES

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ID17060201SL050_03	Basin Creek - source to East Basin Creek	6.77	MILES
ID17060201SL051_04	Valley Creek - Trap Creek to mouth	6.86	MILES
ID17060201SL053_03	Valley Creek - source to Trap Creek	10.29	MILES
ID17060201SL055_02	Trap Creek - source to Meadow Creek	8.58	MILES
ID17060201SL057_02	Elk Creek - source to mouth	24.91	MILES
ID17060201SL058_02	Stanley Creek - source to mouth	23.25	MILES
ID17060201SL060_02	Iron Creek - source to mouth	10.06	MILES
ID17060201SL065_02	Fishhook Creek - source to mouth	15.78	MILES
ID17060201SL068_02	Salmon River - Unnamed Tributary (T19N, R13E, Sec. 25) to	23.44	MILES
ID17060201SL068_05	Salmon River - Unnamed Tributary (T19N, R13E, Sec. 25) to	9.14	MILES
ID17060201SL069_02	Decker Creek - Huckleberry Creek to mouth	14.26	MILES
ID17060201SL069_03	Decker Creek - Huckleberry Creek to mouth	1	MILES
ID17060201SL069_04	Decker Creek - Huckleberry Creek to mouth	0.3	MILES
ID17060201SL070_02	Decker Creek - source to Huckleberry Creek	6.22	MILES
ID17060201SL071_02	Huckleberry Creek - source to mouth	6	MILES
ID17060201SL073_05	Salmon River - Alturas Lake Creek to Fisher Creek	5.11	MILES
ID17060201SL074_02	Hell Roaring Creek - source to mouth	14.52	MILES
ID17060201SL075_03	Alturas Lake Creek - Alturas Lake to mouth	3.87	MILES
ID17060201SL080_03	Alpine Creek - source to mouth	3.28	MILES
ID17060201SL081_02	Salmon River - source to Alturas Lake Creek	51.02	MILES
ID17060201SL081_03	Salmon River - source to Alturas Lake Creek	10.96	MILES
ID17060201SL081_04	Salmon River - source to Alturas Lake Creek	10.96	MILES
ID17060201SL082_02	Beaver Creek - source to mouth	20.4	MILES
ID17060201SL083_02	Smiley Creek - source to mouth	15.52	MILES
ID17060201SL083_03	Smiley Creek - source to mouth	7.61	MILES
ID17060201SL085_02	Pole Creek - source to mouth	26.12	MILES
ID17060201SL085_03	Pole Creek - source to mouth	5.29	MILES
ID17060201SL087_02	Fourth of July Creek - source to mouth	16.73	MILES
ID17060201SL087_03	Fourth of July Creek - source to mouth	8.77	MILES
ID17060201SL088_02	Fisher Creek - source to mouth	19.43	MILES
ID17060201SL090_02	Gold Creek - source to mouth	10.05	MILES
ID17060201SL091_02	Little Casino Creek - source to mouth	10.23	MILES
ID17060201SL092_02	Big Casino Creek - source to mouth	13.72	MILES
ID17060201SL093_02	Rough Creek - source to mouth	8.8	MILES
ID17060201SL094_03	Warm Springs Creek - Swimm Creek to mouth	7.19	MILES
ID17060201SL099_03	Slate Creek - source to mouth	4.7	MILES
ID17060201SL105_02	Big Boulder Creek - source to mouth	23.28	MILES
ID17060201SL105_03	Big Boulder Creek - source to mouth	9.32	MILES
ID17060201SL106_02	Little Boulder Creek - source to mouth	20.85	MILES

ID17060201SL107_03	Germania Creek - Chamberlain Creek to mouth	4.68	MILES
ID17060201SL109_02	Germania Creek - source to Chamberlain Creek	42.94	MILES
ID17060201SL110_04	East Fork Salmon River - confluence of South and West Fork	4.46	MILES
ID17060201SL114_02	West Pass Creek - source to mouth	25.23	MILES
ID17060201SL114_03	West Pass Creek - source to mouth	3.91	MILES
ID17060201SL118_04	Herd Creek - confluence of West Fork Herd Creek and East P	7.47	MILES
ID17060201SL123_02	Lake Creek - source to mouth	21.37	MILES
ID17060201SL124_04	Road Creek - Corral Basin Creek to mouth	4.79	MILES

17060202 Pahsimeroi

ID17060202SL019_03	Mahogany Creek - source to mouth	2.96	MILES
ID17060202SL020_03	Pahsimeroi River - confluence of Rock Creek and East Fork P	2.96	MILES
ID17060202SL022_02	East Fork Pahsimeroi River - source to mouth	39.88	MILES
ID17060202SL024_02	Burnt Creek - source to Long Creek	23.24	MILES
ID17060202SL028_03	Goldburg Creek - Donkey Creek to mouth	9.39	MILES
ID17060202SL031_02	Big Creek - confluence of North and South Fork Big Creeks to	24.32	MILES
ID17060202SL032_02	South Fork Big Creek - source to mouth	27.89	MILES
ID17060202SL033_02	North Fork Big Creek - source to mouth	30.01	MILES
ID17060202SL035_02	Patterson Creek - source to and including Inyo Creek	28.37	MILES
ID17060202SL035_03	Patterson Creek - source to and including Inyo Creek	1.26	MILES
ID17060202SL036_02	Falls Creek - source to mouth	39.29	MILES
ID17060202SL038_03	Morse Creek - source to Irrigation junction (T15S, R23E)	3.8	MILES

17060203 Middle Salmon-Panther

ID17060203SL001_02	Salmon River - Panther Creek to Middle Fork Salmon River	30	MILES
ID17060203SL002_05	Panther Creek - Big Deer Creek to mouth	12.98	MILES
ID17060203SL003_02	Garden Creek - source to mouth	13.93	MILES
ID17060203SL004_02	Clear Creek - source to mouth	41.26	MILES
ID17060203SL006_03	Big Deer Creek - source to South Fork Big Deer Creek	8.24	MILES
ID17060203SL009_02	Bucktail Creek - source to mouth	1.82	MILES
ID17060203SL010_02	Panther Creek - Napias Creek to Big Deer Creek	21.16	MILES
ID17060203SL012a_02	Blackbird Creek - source to Blackbird Reservoir Dam	2.93	MILES
ID17060203SL012b_02	Blackbird Creek - Blackbird Reservoir Dam to mouth	7.83	MILES
ID17060203SL014_02	Panther Creek - Porphyry Creek to Blackbird Creek	8.65	MILES
ID17060203SL014_03	Panther Creek - Porphyry Creek to Blackbird Creek	1.89	MILES
ID17060203SL014_04	Panther Creek - Porphyry Creek to Blackbird Creek	4.76	MILES
ID17060203SL015_02	Musgrove Creek - source to mouth	17.7	MILES
ID17060203SL016_02	Porphyry Creek - source to mouth	9.5	MILES
ID17060203SL017_02	Panther Creek - source to Porphyry Creek	44.19	MILES
ID17060203SL017_03	Panther Creek - source to Porphyry Creek	11.61	MILES

ID17060203SL018_02	Moyer Creek - source to mouth	40.09	MILES
ID17060203SL018_03	Moyer Creek - source to mouth	7.3	MILES
ID17060203SL019_03	Woodtick Creek - source to mouth	5.14	MILES
ID17060203SL020_03	Deep Creek - Little Deep Creek to mouth	2.31	MILES
ID17060203SL022_02	Deep Creek - source to Little Deep Creek	17.35	MILES
ID17060203SL023_04	Napias Creek - Moccasin Creek to mouth	2.68	MILES
ID17060203SL024_02	Napias Creek - Arnett Creek to and including Moccasin Creek	28.69	MILES
ID17060203SL024_03	Napias Creek - Arnett Creek to and including Moccasin Creek	5.51	MILES
ID17060203SL024_04	Napias Creek - Arnett Creek to and including Moccasin Creek	1.37	MILES
ID17060203SL025_02	Napias Creek - source to Arnett Creek	20.64	MILES
ID17060203SL026_02	Arnett Creek - source to mouth	18.31	MILES
ID17060203SL028_02	Beaver Creek - source to mouth	17.52	MILES
ID17060203SL030_02	Pine Creek - source to mouth	24.39	MILES
ID17060203SL031_02	East Boulder Creek - source to mouth	14.4	MILES
ID17060203SL032_02	Salmon River - North Fork Sheep Creek to Indian Creek	21.53	MILES
ID17060203SL035_03	Moose Creek - Dolly Creek to Little Moose Creek	1.43	MILES
ID17060203SL036_02	Moose Creek - source to Dolly Creek	16.44	MILES
ID17060203SL037_02	Dolly Creek - source to mouth	9.35	MILES
ID17060203SL039_02	Salmon River - Carmen Creek to North Fork Salmon River	57.04	MILES
ID17060203SL043_03	Williams Creek - confluence of North and South Fork Williams	4.9	MILES
ID17060203SL044_02	North Fork Williams Creek - source to mouth	6.42	MILES
ID17060203SL045_02	South Fork Williams Creek - source to mouth	7.05	MILES
ID17060203SL048_02	Iron Creek - North Fork Iron Creek to mouth	29.13	MILES
ID17060203SL048_03	Iron Creek - North Fork Iron Creek to mouth	8.96	MILES
ID17060203SL049_02	North Fork Iron Creek - source to mouth	20.08	MILES
ID17060203SL050_02	Iron Creek - source to North Fork Iron Creek	4.49	MILES
ID17060203SL051_02	West Fork Iron Creek - source to mouth	5.69	MILES
ID17060203SL052_02	South Fork Iron Creek - source to mouth	6.96	MILES
ID17060203SL053_02	Salmon River - Pahsimeroi River to Iron Creek	52.04	MILES
ID17060203SL054_03	Hot Creek - source to mouth	12.61	MILES
ID17060203SL056_02	Allison Creek - source to mouth	10.22	MILES
ID17060203SL057_03	McKim Creek - source to mouth	2.48	MILES
ID17060203SL060_03	Twelvemile Creek - source to mouth	3.31	MILES
ID17060203SL061_03	Carmen Creek - Freeman Creek to mouth	5.25	MILES
ID17060203SL062_02	Freeman Creek - source to mouth	20.68	MILES
ID17060203SL063_02	Carmen Creek - source to Freeman Creek	24.01	MILES
ID17060203SL064_02	Tower Creek - source to mouth	19.77	MILES
ID17060203SL064_03	Tower Creek - source to mouth	1.93	MILES
ID17060203SL066_02	Fourth of July Creek - source to Little Fourth of July Creek	17.05	MILES

ID17060203SL071_03	Sheep Creek - source to mouth	8.64	MILES
ID17060203SL073_02	Dahlonega Creek - Nez Perce Creek to mouth	11.82	MILES
ID17060203SL074_02	Dahlonega Creek - source to Nez Perce Creek	4.88	MILES
ID17060203SL076_02	Anderson Creek - source to mouth	7.65	MILES
ID17060203SL077_02	North Fork Salmon River - Twin Creek to Dahlonega Creek	15.71	MILES
ID17060203SL077_03	North Fork Salmon River - Twin Creek to Dahlonega Creek	5.71	MILES
ID17060203SL078_02	North Fork Salmon River - source to Twin Creek	17.46	MILES
ID17060203SL080_02	Twin Creek - source to mouth	14.28	MILES
ID17060203SL081_02	Hughes Creek - source to mouth	48.24	MILES
ID17060203SL081_03	Hughes Creek - source to mouth	6.12	MILES
ID17060203SL083_03	Indian Creek - source to mouth	11.37	MILES
ID17060203SL084_02	Squaw Creek - source to mouth	15.88	MILES
ID17060203SL085_02	Spring Creek - source to mouth	17.41	MILES
ID17060203SL085_03	Spring Creek - source to mouth	2.28	MILES
ID17060203SL086_02	Boulder Creek - source to mouth	13.38	MILES
ID17060203SL087_03	Owl Creek - East Fork Owl Creek to mouth	1.96	MILES
ID17060203SL090_02	Colson Creek - source to mouth	11.34	MILES

17060204 Lemhi

ID17060204SL001_02	Lemhi River - Kenney Creek to mouth	43.86	MILES
ID17060204SL002_02	Mulkey Creek - source to mouth	6.1	MILES
ID17060204SL003a_03	Withington Creek - diversion (T20N, R23E, Sec. 09) to mouth	2.25	MILES
ID17060204SL003b_02	Withington Creek - source to diversion (T20N, R23E, Sec. 09)	21.25	MILES
ID17060204SL003b_03	Withington Creek - source to diversion (T20N, R23E, Sec. 09)	3.19	MILES
ID17060204SL004_02	Haynes Creek - source to mouth	19.82	MILES
ID17060204SL009_05	Hayden Creek - Basin Creek to mouth	3.5	MILES
ID17060204SL010_04	Basin Creek - Lake Creek to mouth	2.66	MILES
ID17060204SL013_02	McNutt Creek - source to mouth	16.76	MILES
ID17060204SL015_04	Hayden Creek - Bear Valley Creek to Basin Creek	4.96	MILES
ID17060204SL016_04	Bear Valley Creek -Wright Creek to mouth	2.78	MILES
ID17060204SL017_02	Bear Valley Creek - source to Wright Creek	13.83	MILES
ID17060204SL017_03	Bear Valley Creek - source to Wright Creek	3.64	MILES
ID17060204SL018_03	Wright Creek - source to mouth	3.7	MILES
ID17060204SL019_02	Kadletz Creek - source to mouth	4.95	MILES
ID17060204SL020_02	Hayden Creek -West Fork Hayden Creek to Bear Valley Creek	20.95	MILES
ID17060204SL020_03	Hayden Creek -West Fork Hayden Creek to Bear Valley Creek	6.52	MILES
ID17060204SL023_02	East Fork Hayden Creek - source to mouth	11.34	MILES
ID17060204SL026b_02	Mill Creek - source to diversion (T16N, R24E, Sec. 22)	10.53	MILES
ID17060204SL028_02	Lee Creek - source to mouth	19.55	MILES
ID17060204SL029a_03	Big Eightmile Creek - diversion (T16N, R25E, Sec. 21) to mou	3.5	MILES

ID17060204SL029b_03	Big Eightmile Creek - source to diversion (T16N, R25E, Sec.	8.16	MILES
ID17060204SL031_04	Big Timber Creek - Little Timber Creek to mouth	4.85	MILES
ID17060204SL032b_02	Little Timber Creek - source to diversion (T15N, R25E, Sec.	13.73	MILES
ID17060204SL032b_03	Little Timber Creek - source to diversion (T15N, R25E, Sec.	1.64	MILES
ID17060204SL033_03	Big Timber Creek - Rocky Creek to Little Timber Creek	9.6	MILES
ID17060204SL046_02	Clear Creek - source to mouth	17.23	MILES
ID17060204SL047_02	Tenmile Creek - Powderhorn Gulch to mouth	2.81	MILES
ID17060204SL050b_03	Hawley Creek - source to diversion (T15N, R27E, Sec. 03)	11.46	MILES
ID17060204SL051b_03	Canyon Creek - source to diversion (T16N, R26E, Sec.22)	8.81	MILES
ID17060204SL055b_03	Yearian Creek - source to diversion (T17N, R24E, Sec. 03)	2.23	MILES
ID17060204SL057_03	Cow Creek - source to mouth	1.89	MILES
ID17060204SL058_02	Agency Creek - source to Cow Creek	29.92	MILES
ID17060204SL058_04	Agency Creek - source to Cow Creek	4.01	MILES
ID17060204SL059b_02	Pattee Creek - source to diversion (T19N, R24E, Sec. 16)	7.39	MILES
ID17060204SL059b_03	Pattee Creek - source to diversion (T19N, R24E, Sec. 16)	22.42	MILES

17060205 Upper Middle Fork Salmon

ID17060205SL002_02	Marble Creek and tributaries - 1st and 2nd order	88.93	MILES
ID17060205SL008_02	Elkhorn Creek - 1st and 2nd order	29.01	MILES
ID17060205SL009_02	Sulphur Creek - 1st and 2nd order	59.31	MILES
ID17060205SL010_02	Boundary Creek - entire drainage	9.3	MILES
ID17060205SL011_02	Dagger Creek - entire drainage	16.34	MILES
ID17060205SL012_02	Lower Bear Valley Creek - 1st and 2nd order tributaries	53.3	MILES
ID17060205SL012_03	Bear Valley Creek - 3rd order	2.08	MILES
ID17060205SL013_02	Elk and Bearskin Creeks - 1st & 2nd order (non-wilderness)	40.9	MILES
ID17060205SL013_02a	Elk and Porter Creeks - 1st & 2nd order (wilderness)	46.45	MILES
ID17060205SL013_03a	Elk & Porter Creeks - 3rd order	3.29	MILES
ID17060205SL014_02	Sheep Trail Creek - entire drainage	8.18	MILES
ID17060205SL015_02	Cub Creek - entire drainage	2.62	MILES
ID17060205SL016_02	Cache Creek and tributaries - 1st and 2nd order	16.05	MILES
ID17060205SL016_03	Cache Creek - 3rd order	4.38	MILES
ID17060205SL017_02	Fir Creek - 1st and 2nd order	11.49	MILES
ID17060205SL018_02	Marsh Creek - Beaver Creek to mouth	11.52	MILES
ID17060205SL019_02	Marsh Creek - Knapp Creek to Beaver Creek	6.04	MILES
ID17060205SL020_03	Cape Horn Creek - Banner Creek to mouth	4.11	MILES
ID17060205SL021_02	Cape Horn Creek - source to Banner Creek	6.29	MILES
ID17060205SL022_02	Banner Creek - source to mouth	17.28	MILES
ID17060205SL023_02	Swamp Creek - source to mouth	7.38	MILES
ID17060205SL028_02	Beaver Creek - Bear Creek to mouth	14.13	MILES
ID17060205SL029_02	Beaver Creek - Winnemucca Creek to Bear Creek	7.48	MILES

ID17060205SL031_02	Beaver Creek - source to Winnemucca Creek	18.42	MILES
ID17060205SL032_02	Bear Creek - source to mouth	10.87	MILES
ID17060205SL038_02	Lime, Bruin, Garnet and Sulphur Creeks - 1st and 2nd order	20.12	MILES
ID17060205SL038_03	Sulphur Creek - 3rd order	2.1	MILES
ID17060205SL039_02	Float Creek - 1st and 2nd order	11.56	MILES
ID17060205SL039_03	Float Creek - 3rd order (Harlan Creek to Rapid River)	2.61	MILES
ID17060205SL041_02	Vanity Creek - 1st and 2nd order	22.23	MILES
ID17060205SL041_03	Vanity Creek - 3rd order (Seafoam Creek to Rapid River)	0.84	MILES
ID17060205SL042_02	Rapid River above Vanity Creek - 1st and 2nd order tribs	39.06	MILES
ID17060205SL042_03	Rapid River and Pinyon Creeks - 3rd order sections	4.09	MILES
ID17060205SL062_02	Mayfield Creek - confluence of East and West Fork Mayfield C	7.39	MILES
ID17060205SL063_02	West Fork Mayfield Creek - source to mouth	21.45	MILES
ID17060205SL067_02	Warm Springs Creek - Trapper Creek to mouth	56.87	MILES

17060206 Lower Middle Fork Salmon

ID17060206SL003_02	Big Creek - 1st and 2nd order tributaries	131.61	MILES
ID17060206SL003_03	Big Creek - 3rd order (Belvidere Creek to Logan Creek)	4.97	MILES
ID17060206SL003_04	Big Creek - 4th order (Monumental Creek to Logan Creek)	12.73	MILES
ID17060206SL009_02	Smith Creek - 1st and 2nd order	14.38	MILES
ID17060206SL009_03	Smith Creek - 3rd order, between NF Smith and Big Creeks	3.95	MILES
ID17060206SL010_02	Logan and Government Creeks - 1st and 2nd order	22.7	MILES
ID17060206SL010_03	Logan Creek - 3rd order	0.41	MILES
ID17060206SL012_02	Monumental Creek - 1st & 2nd order mainstem tributaries	82.57	MILES
ID17060206SL012_03	Monumental Creek - 3rd order (Annie Creek to West Fork)	8.05	MILES
ID17060206SL024_03	West Fork Camas Creek - source to mouth	5.22	MILES
ID17060206SL034_02a	Arrastra Creek	4.82	MILES
ID17060206SL038_02	Yellowjacket Creek - Hoodoo Creek to Jenny Creek	10.11	MILES
ID17060206SL040_02	Little Jacket Creek - source to mouth	8.3	MILES
ID17060206SL042_02	Trail Creek - source to mouth	11.1	MILES
ID17060206SL044_02	Hoodoo Creek - source to mouth	18.68	MILES

17060207 Middle Salmon-Chamberlain

ID17060207SL001_07	Salmon River - South Fork Salmon River to river mile 106 (T2	27.42	MILES
ID17060207SL002_03	Fall Creek - 3rd Order	1.33	MILES
ID17060207SL003_02	Carey Creek - source to mouth	7.9	MILES
ID17060207SL008_07	Salmon River - Chamberlain Creek to South Fork Salmon Rive	41.24	MILES
ID17060207SL018_07	Salmon River - Horse Creek to Chamberlain Creek	11.85	MILES
ID17060207SL037_02	Salmon River - Middle Fork Salmon River to Horse Creek	27.52	MILES
ID17060207SL037_07	Salmon River - Middle Fork Salmon River to Horse Creek	11.52	MILES
ID17060207SL040_02	Corn Creek - source to mouth	8.53	MILES

ID17060207SL041_04	Horse Creek - Little Horse Creek to mouth	9.3	MILES
ID17060207SL055_04	Bargamin Creek - source to mouth	15.99	MILES
ID17060207SL061_02	Noble Creek - source to mouth	46.86	MILES
ID17060207SL061_02a	Big Mallard Creek - headwater to SF Big Mallard Creek	8.45	MILES
ID17060207SL061_03	Big Mallard Creek - SF Big Mallard Creek to mouth	13.4	MILES
ID17060207SL062_02	Little Mallard Creek - source to Fish Barrier	10.78	MILES
ID17060207SL063_02	Rhett Creek - source to Rabbit Creek	22.11	MILES
ID17060207SL063_03	Rhett Creek - Rabbit Creek to mouth	2	MILES
ID17060207SL065_02	Jersey Creek - source to mouth	16.14	MILES
ID17060207SL069_02	Big Creek - source to mouth	10.47	MILES
ID17060207SL069_02a	Eutopia Creek - and tributaries	19.35	MILES
ID17060207SL069_03	Big Creek - source to mouth	8.93	MILES

17060208 South Fork Salmon

ID17060208SL001_02	SF Salmon R. below Secesh R: most 1st and 2nd order strea	118.87	MILES
ID17060208SL001_03	Smith Creek - 3rd order (Big Buck Creek to SF Salmon River)	1.08	MILES
ID17060208SL003_02	Pony Creek - entire drainage	18.79	MILES
ID17060208SL004_02	Bear Creek - 1st and 2nd order	13.86	MILES
ID17060208SL005_03	Secesh River, Grouse, and Willow Basket Creeks - 3rd order	7.1	MILES
ID17060208SL005_04	Secesh River - 4th order (Grouse Creek to mouth)	24.33	MILES
ID17060208SL006_02	Lake Creek - 1st and 2nd order	43.66	MILES
ID17060208SL006_03	Lake Creek - 3rd order (Threemile Creek to Summit Creek)	4.05	MILES
ID17060208SL007_02	Summit Creek - entire watershed	15.76	MILES
ID17060208SL009_02	Lick Creek - 1st and 2nd order	25.41	MILES
ID17060208SL009_03	Lick Creek - 3rd order (Prince Creek to Secesh River)	6.24	MILES
ID17060208SL010_02	SF Salmon River and tribs above EFSF - 1st and 2nd order	135.11	MILES
ID17060208SL010_05	South Fork Salmon River - 5th order	8.21	MILES
ID17060208SL011_02	Fitsum Creek - 1st and 2nd order	40.3	MILES
ID17060208SL011_03	Fitsum Creek - 3rd order	2.3	MILES
ID17060208SL012_02	Buckhorn Creek and tributaries - 1st and 2nd order	56.32	MILES
ID17060208SL012_03	Buckhorn Creek - 3rd order	9.02	MILES
ID17060208SL012_04	Buckhorn and WF Buckhorn Creeks - 4th order sections	2.58	MILES
ID17060208SL012_05	Buckhorn Creek - 5th order (WF Buckhorn Creek to mouth)	0.49	MILES
ID17060208SL013_03	Cougar Creek - 3rd order (South Fork Cougar Creek to mouth)	2.79	MILES
ID17060208SL014_03	Blackmare and SF Blackmare Creeks - 3rd order sections	4.82	MILES
ID17060208SL015_02	Dollar and NF Dollar Creeks - 1st and 2nd order	22.37	MILES
ID17060208SL015_03	Dollar Creek - 3rd order (NF Dollar Creek to mouth)	0.94	MILES
ID17060208SL016_02	Six-bit Creek - entire watershed	10.7	MILES
ID17060208SL017_02	Trail Creek & Curtis Creek - 1st and 2nd order	29.55	MILES
ID17060208SL017_03	Curtis Creek - 3rd order (Trail Creek to SF Salmon River)	1.42	MILES

ID17060208SL018_02	Rice Creek - entire watershed	9.41	MILES
ID17060208SL019_02	All 1st and 2nd order streams in Warm Lake Creek drainage	16.21	MILES
ID17060208SL019_03	Warm Lake and Cabin Creeks - 3rd order	1.93	MILES
ID17060208SL020_02	Warm Lake Creek above Warm Lake - entire watershed	6.2	MILES
ID17060208SL020L_0L	Warm Lake	412.1701	ACRES
ID17060208SL021_03	Fourmile Creek - 3rd order (SF Fourmile Creek to mouth)	1.23	MILES
ID17060208SL022_03	Camp and Phoebe Creeks - 3rd order sections	5.34	MILES
ID17060208SL023_02	East Fork South Fork Salmon River - 1st and 2nd order	104.4	MILES
ID17060208SL023_04	East Fork South Fork Salmon River - 4th order section	10.96	MILES
ID17060208SL024_03	Reegan and Caton Creeks - 3rd order sections	7.18	MILES
ID17060208SL025_02a	Lower Johnson Creek - 1st and 2nd order tributaries	60.38	MILES
ID17060208SL025_03	Johnson Creek - 3rd order section	18.12	MILES
ID17060208SL026_02	Burntlog Creek and tributaries - 1st and 2nd order	48.53	MILES
ID17060208SL026_03	Burntlog Creek - 3rd order	10.35	MILES
ID17060208SL027_02	Trapper Creek & tributaries - 1st and 2nd order	13.88	MILES
ID17060208SL027_03	Trapper Creek - 3rd order	4.33	MILES
ID17060208SL028_02	Riordan and NF Riordan Creeks - 1st and 2nd order	21.9	MILES
ID17060208SL028_03	Riordan Creek - 3rd order (North Fork to mouth)	3.67	MILES
ID17060208SL029_02	Sugar Creek & tributaries - 1st and 2nd order	20.4	MILES
ID17060208SL029_03	Sugar Creek - 3rd order (Cane Creek to mouth)	2.79	MILES
ID17060208SL030_03	Tamarack Creek - 3rd order (Bum Cr. to SF Salmon River)	4.62	MILES
ID17060208SL031_02	Profile Creek and tributaries - 1st and 2nd order	21.38	MILES
ID17060208SL031_03	Profile Creek - 3rd order (Missouri Cr. to SF Salmon River)	4.13	MILES
ID17060208SL032_02	Quartz and Vein Creeks - 1st and 2nd order	16.63	MILES
ID17060208SL032_03	Quartz Creek - 3rd order	3.33	MILES
ID17060208SL034_02	Elk Creek and tributaries - 1st and 2nd order	37.03	MILES
ID17060208SL034_03	Elk Creek and West Fork Elk Creek - 3rd order sections	1.16	MILES
ID17060208SL034_04	Elk Creek - 4th order (West Fork Elk Creek to mouth)	4.12	MILES

17060209 Lower Salmon

ID17060209SL003_03	Cottonwood Creek - unnamed trib to mouth	5.92	MILES
ID17060209SL010_02	Deer Creek - source to EF Deer Creek	21.41	MILES
ID17060209SL010_03	Deer Creek - EF Deer Creek to mouth	3.17	MILES
ID17060209SL012_02	China Creek- source to Little China Creek	7.45	MILES
ID17060209SL012_03	China Creek- Little China Creek to mouth	1.36	MILES
ID17060209SL013_02	Cow Creek - source to mouth	15.16	MILES
ID17060209SL014_03	Race Creek - confluence West and SF Race Creek to mouth	1.67	MILES
ID17060209SL015_02	West Fork Race Creek - source to mouth	10.31	MILES
ID17060209SL015_03	West Fork Race Creek - source to mouth	1.37	MILES
ID17060209SL017_02	Kessler Creek - source to South Fork Race Creek	4.44	MILES

ID17060209SL026_02	Kelly Creek - source to mouth	14.71	MILES
ID17060209SL029_02	Allison Creek - roadless boundary to West Fork Allison Creek	4.26	MILES
ID17060209SL029_02a	Allison Creek - headwaters to roadless boundary	5.13	MILES
ID17060209SL034_04	Slate Creek - from and including Hurley Creek to mouth	5.29	MILES
ID17060209SL035_02	Little Van Buren Creek - source to mouth	5.96	MILES
ID17060209SL036_04	Slate Creek - Little Slate Creek to Hurley Creek	7.36	MILES
ID17060209SL037_02	Little Slate Creek - headwaters and tributaries	40.26	MILES
ID17060209SL037_02a	Little Boulder Creek - source to mouth	7.6	MILES
ID17060209SL037_02b	Big Boulder Creek - source to mouth	7.34	MILES
ID17060209SL037_03	Little Slate Creek - unnamed trib to Van Buren Creek	9.49	MILES
ID17060209SL037_04	Little Slate Creek - Van Buren Cr to mouth	8.07	MILES
ID17060209SL039_02	Van Buren Creek - source to NF Van Buren	10.16	MILES
ID17060209SL039_03	Van Buren Creek - NF Van Buren Cr to mouth	2	MILES
ID17060209SL040_02	Turnbull Creek - source to mouth	4.97	MILES
ID17060209SL041_02	Slate Creek - Wilderness boundary to Little Slate Creek	7.71	MILES
ID17060209SL041_02a	Slate Creek	9.55	MILES
ID17060209SL042_02	North Fork Slate Creek - source to mouth	15.13	MILES
ID17060209SL044_03	Skookumchuck Creek - confluence North and South Fork Sko	3.36	MILES
ID17060209SL045_02	South Fork Skookumchuck Creek - source to mouth	13.36	MILES
ID17060209SL048_03	South Fork Whitebird Creek - Little Whitebird Creek to mouth	4.38	MILES
ID17060209SL049_02	Little Whitebird Creek - source to mouth	6.88	MILES
ID17060209SL051_02	Jungle Creek - source to mouth	2.16	MILES
ID17060209SL054_02	Pinnacle Creek - source to mouth	5.86	MILES
ID17060209SL055_03	North Fork Whitebird Creek - 3rd order segment	6.05	MILES
ID17060209SL060_03	Deep Creek - source to mouth	1.43	MILES
ID17060209SL061_02	Maloney Creek - source to WF Maloney and tributaries	30.04	MILES
ID17060209SL061_03	Maloney Creek - source to mouth	1.43	MILES
ID17060209SL062_02	Deer Creek - tributaries	20.87	MILES
ID17060209SL062_02a	Deer Creek - source to WF Deer Creek	26.89	MILES
ID17060209SL062_03	Deer Creek - downstream of waterfall to mouth	6.76	MILES
ID17060209SL063_03	Eagle Creek - source to mouth	5.97	MILES
ID17060209SL064_02	China Creek - source to Banks Creek	21.87	MILES
ID17060209SL064_03	China Creek - source to mouth	1.83	MILES

17060210 Little Salmon

ID17060210SL001_02	Little Salmon River - 1st and 2nd order below Round Valley	98.51	MILES
ID17060210SL001_02a	Indian Creek - entire drainage	2.45	MILES
ID17060210SL001_03	Squaw Creek - 3rd order	5.61	MILES
ID17060210SL002_02	Rapid River and tributaries - 1st and 2nd order	83.11	MILES
ID17060210SL002_02a	Shingle Creek - mainstem 1st order headwaters	6.09	MILES

ID17060210SL002_03	Rapid River and Lake Fork - 3rd order	12.51	MILES
ID17060210SL002_03a	Shingle Creek - 3rd order (South Fork to mouth)	0.9	MILES
ID17060210SL002_04	Rapid River - 4th order	6.55	MILES
ID17060210SL003_02	WF Rapid River and tributaries - 1st and 2nd order	33	MILES
ID17060210SL003_03	West Fork Rapid River - 3rd order (Bridge Creek to mouth)	2.47	MILES
ID17060210SL005_02	Boulder Creek - 1st and 2nd order	45.29	MILES
ID17060210SL005_03	Boulder Creek - 3rd order	7.3	MILES
ID17060210SL006_02	Round Valley Creek - 1st and 2nd order	18.85	MILES
ID17060210SL006_03	Round Valley Creek - 3rd order (Brush Creek to mouth)	1.86	MILES
ID17060210SL007_02	Little Salmon River - Meadow Valley tributaries	52.84	MILES
ID17060210SL007_02a	Little Salmon River, Vick and Mill Creeks- 1st and 2nd order	18.88	MILES
ID17060210SL007_03	Little Salmon River - 3rd order	1.18	MILES
ID17060210SL008_02	Mud and Little Mud Creeks - 1st and 2nd order	35.42	MILES
ID17060210SL009_02	Big Creek - upper 1st and 2nd order (forested)	30.63	MILES
ID17060210SL010_02	Goose Creek - 1st and 2nd order	54.95	MILES
ID17060210SL010_03	Goose and Little Goose Creeks - 3rd order sections	8.34	MILES
ID17060210SL011_02	Brundage Reservoir tributaries - 1st and 2nd order	3.79	MILES
ID17060210SL011L_0L	Brundage Reservoir	214.98	ACRES
ID17060210SL012_02	Goose Creek - 1st and 2nd order above Goose Lake	6.58	MILES
ID17060210SL013_02	Sixmile Creek - entire drainage	10.48	MILES
ID17060210SL014_02	Hazard Creek and tributaries - 1st and 2nd order	43.39	MILES
ID17060210SL014_03	Hazard Creek - 3rd order	7.21	MILES
ID17060210SL014_04	Hazard Creek - Hard Creek to mouth	0.88	MILES
ID17060210SL015_02	Hard Creek and tributaries - 1st and 2nd order	33.87	MILES
ID17060210SL015_03	Hard Creek - 3rd order	10.01	MILES
ID17060210SL016_02	Elk and Little Elk Creeks - 1st and 2nd Order	13.37	MILES
ID17060210SL016_02a	Elk Creek - roadless boundary to Little Elk Creek	3.18	MILES
ID17060210SL016_03	Elk Creek - Little Elk Creek to mouth	0.98	MILES

Southwest

17050101 C. J. Strike Reservoir

ID17050101SW002_02	Bruneau Sand Dunes Lake	0.06	MILES
ID17050101SW002_0L	Bruneau Sand Dunes Lake	37.47	ACRES
ID17050101SW003_02	Browns Creek - lower 1st and 2nd order	31.67	MILES
ID17050101SW013_02	Alkali Creek - 1st & 2nd order	29.38	MILES
ID17050101SW013_03	Alkali Creek - 3rd order section	4.36	MILES
ID17050101SW014_02	Cold Springs Creek - 1st and 2nd order	24.96	MILES
ID17050101SW015_02	Ryegrass Creek - entire watershed	28.28	MILES

ID17050101SW016_02	Bennett Creek - 1st and 2nd order	53.08	MILES
ID17050101SW016_03	Bennett Creek - 3rd order	29.34	MILES
ID17050101SW018_02	Dive Creek - 1st and 2nd order	4.3	MILES
ID17050101SW025_03	Syrup Creek - 3rd order (Cottonwood Creek to Long Tom Cree	5.77	MILES

17050102 Bruneau

ID17050102SW003_04	Little Jacks Creek - 4th order section	22.38	MILES
ID17050102SW006_02	Duncan Creek - 1st and 2nd order	38.06	MILES
ID17050102SW006_03	Duncan Creek - 3rd order (Zeno Canyon to Big Jacks Creek)	5.42	MILES
ID17050102SW007_02	Wickahoney Creek - 1st and 2nd order	87.9	MILES
ID17050102SW007_03	Wickahoney Creek - 3rd order	3.54	MILES
ID17050102SW007_04	Wickahoney Creek - 4th order	3.63	MILES
ID17050102SW010_02	Hot Creek - 1st and 2nd order	37.19	MILES
ID17050102SW010_03	Hot Creek - 3rd order	13	MILES
ID17050102SW011_06	Bruneau River - Clover Creek to Hot Creek	18.22	MILES
ID17050102SW013_05	Bruneau River - Jarbidge River to Sheep Creek	13.57	MILES
ID17050102SW013_06	Bruneau River - Sheep Creek to Clover Creek	8.71	MILES
ID17050102SW014_03	Sheep Creek - 3rd order	14.2	MILES
ID17050102SW014_05	Sheep Creek - 5th order	22.23	MILES
ID17050102SW015_03	Louse and Crab Creeks - 3rd order sections	25.05	MILES
ID17050102SW017_03	Bull Creek - 3rd order (West Fork Bull Creek to mouth)	11.64	MILES
ID17050102SW020_05	Bruneau River - Idaho/Nevada border to Jarbidge River	28.37	MILES
ID17050102SW021_02	Columbet and Rattlesnake Creeks - entire drainages	67.99	MILES
ID17050102SW021_04	Jarbidge River - 4th order (Nevada border to Bruneau River)	32.79	MILES
ID17050102SW024_03	East Fork Jarbidge River - Idaho/Nevada border to mouth	4.93	MILES
ID17050102SW030_03	Big Flat Creek - 3rd order	11.48	MILES
ID17050102SW030_04	Big Flat Creek - 4th order	3.86	MILES
ID17050102SW032_02	Cherry Creek - Idaho/Nevada border to mouth	13.87	MILES
ID17050102SW033_02	Deer Creek - 1st and 2nd order	18.43	MILES
ID17050102SW034_03	Deadwood Creek - 3rd order	4.1	MILES

17050103 Middle Snake-Succor

ID17050103SW006_02	Snake River - 1st & 2nd order between Corder Cr. & Marsing	181.01	MILES
ID17050103SW006_03	Snake River - 3rd order unnamed tributaries near Sinker Cr.	7.46	MILES
ID17050103SW006_07a	Snake River - Castle Creek to Swan Falls	13.02	MILES
ID17050103SW007_02	Squaw Creek - 1st & 2nd order	67.62	MILES
ID17050103SW007_03	Squaw Creek - 3rd order	12.09	MILES
ID17050103SW009_02	Reynolds Creek - 1st and 2nd order	170.46	MILES
ID17050103SW012_03	Sinker Creek - 3rd order	9.2	MILES
ID17050103SW024_04	Shoofly Creek - 4th order (West Fork to Snake River)	20.03	MILES

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17050104 Upper Owyhee

ID17050104SW001_06	Owyhee River - 6th order (Juniper Creek to SF Owyhee River)	51.24	MILES
ID17050104SW014_02	Shoofly Creek & Tributaries - 1st & 2nd order	53.57	MILES
ID17050104SW014_03	Shoofly Creek - 3rd order	12.93	MILES
ID17050104SW014_04	Shoofly Creek - 4th order	13.89	MILES
ID17050104SW025_02	Big Springs Creek - 1st and 2nd	35.89	MILES
ID17050104SW026_02	Deep Creek - 1st and 2nd order rangeland tributaries	167.19	MILES
ID17050104SW026_03a	Deep Creek - 3rd order forested tributaries	8.59	MILES

17050107 Middle Owyhee

ID17050107SW005_03	Pole Creek - 3rd order	1.46	MILES
ID17050107SW006_02	Squaw Creek and tributaries - 1st and 2nd order	51.72	MILES
ID17050107SW006_03	Squaw Creek - 3rd order	8.47	MILES

17050108 Jordan

ID17050108SW003_02	Williams Creek - 1st and 2nd order	20.33	MILES
ID17050108SW005_03	South Mountain Creek - 3rd order	4.57	MILES
ID17050108SW005_05	Big Boulder Creek - South Boulder Creek to Jordan Creek	7.63	MILES
ID17050108SW006_03	South Boulder and Indian Creeks - 3rd order sections	8.42	MILES
ID17050108SW010_03	Rock Creek - 3rd order below Triangle Reservoir	5.06	MILES
ID17050108SW012_04	Josephine Creek - 4th order (Wickiup Creek to mouth)	8.35	MILES
ID17050108SW017_02	Flint and East Creeks - 1st and 2nd order	18.62	MILES
ID17050108SW017_03	Flint Creek - 3rd order (East Creek to mouth)	4.35	MILES
ID17050108SW018_02	Louse Creek - 1st and 2nd order	20.55	MILES
ID17050108SW018_03	Louse Creek - 3rd order (Sullivan Gulch to mouth)	5.49	MILES
ID17050108SW021_04	Cow Creek - 4th order	4.3	MILES

17050111 North And Middle Fork Boise

ID17050111SW001_02	MF Boise River - 1st and 2nd order forested tributaries	199.79	MILES
ID17050111SW001_02a	MF Boise River: 1st and 2nd order rangeland tributaries	11.21	MILES
ID17050111SW001_03	MF Boise River, Swanholm and Lost Man Creeks: 3rd order	18.45	MILES
ID17050111SW001_04	Middle Fork Boise River - 4th order	34.19	MILES
ID17050111SW002_02	East Fork Roaring River - 1st and 2nd order	30.79	MILES
ID17050111SW002_03	Roaring River and EF Roaring River - 3rd order sections	8.29	MILES
ID17050111SW003_02	Hot Creek - entire drainage	8.08	MILES
ID17050111SW004_02	Yuba River - 1st and 2nd order	32.89	MILES
ID17050111SW004_03	Yuba River and Corbus Creek - 3rd order sections	3.45	MILES
ID17050111SW004_04	Yuba River - 4th order section	2.86	MILES
ID17050111SW005_02	Decker Creek - 1st and 2nd order	24.34	MILES
ID17050111SW005_03	Decker Creek - 3rd order	1.15	MILES

ID17050111SW006_02	Queens River and China Fork - 1st and 2nd order	33.68	MILES
ID17050111SW006_03	Queens River - 3rd order section	2.19	MILES
ID17050111SW007_02	Little Queens River & tributaries - 1st and 2nd order	23.51	MILES
ID17050111SW007_03	Little Queens River - 3rd order (Right Creek to mouth)	1.01	MILES
ID17050111SW008_02	Black Warrior Creek & tributaries - 1st and 2nd order	20.33	MILES
ID17050111SW008_03	Black Warrior Creek - 3rd order	2.38	MILES
ID17050111SW009_02	Browns Creek - 1st and 2nd order	11.48	MILES
ID17050111SW009_03	Browns Creek - 3rd order	1.57	MILES
ID17050111SW010_02	NF Boise River and Trail Creek - 1st and 2nd order	148.73	MILES
ID17050111SW010_03	NF Boise River and Trail Creek - 3rd order sections	8.77	MILES
ID17050111SW010_04	North Fork Boise River - 4th order	17.59	MILES
ID17050111SW010_05	North Fork Boise River - 5th order	18.74	MILES
ID17050111SW011_02	Johnson Creek & tributaries - 1st and 2nd order	27.57	MILES
ID17050111SW011_03	Johnson Creek - 3rd order (Grouse Creek to mouth)	4.01	MILES
ID17050111SW012_02	Bear River and tributaries: 1st and 2nd order sections	39.29	MILES
ID17050111SW012_03	Bear River - 3rd order section	8.18	MILES
ID17050111SW013_02	Big and Little Owl Creeks - entire drainage	12.07	MILES
ID17050111SW014_02	Crooked R, Pikes Fk, and Beaver Cr - 1st and 2nd order	125.42	MILES
ID17050111SW014_03	Crooked River, Pikes Fork and Beaver Creek - 3rd order	3.86	MILES
ID17050111SW014_04	Crooked River - 4th order	12.91	MILES
ID17050111SW015_02	Rabbit Creek & tributaries - 1st and 2nd order	34.35	MILES
ID17050111SW015_03	Rabbit Creek - 3rd order	6.4	MILES
ID17050111SW016_02	Meadow Creek - 1st and 2nd order	7.28	MILES
ID17050111SW017_02	French Creek - entire watershed	10.83	MILES

17050112 Boise-Mores

ID17050112SW001L_0L	Lucky Peak Reservoir	2765.19	ACRES
ID17050112SW002L_0L	Arrowrock Reservoir (not including SF Boise River arm)	3000	ACRES
ID17050112SW003_02	Grouse Creek - 1st and 2nd order	13.04	MILES
ID17050112SW004_02	Birch, Badger, Haga, and Alder Creeks	38.26	MILES
ID17050112SW005_04	Sheep Creek - 4th order (South Fork Sheep Creek to mouth)	1.32	MILES
ID17050112SW006_02	Brown Creek - 1st and 2nd order	4.21	MILES
ID17050112SW007_02	Cottonwood Creek and tributaries - 1st and 2nd order	27.7	MILES
ID17050112SW007_03	Cottonwood Creek - 3rd order (North Fork to mouth)	2.74	MILES
ID17050112SW011_02	Thorn Creek - 1st and 2nd order	29.62	MILES
ID17050112SW012_02	Elk Creek and tributaries - 1st and 2nd order	44.55	MILES
ID17050112SW012_03	Elk Creek - 3rd order (Ross Fork to mouth)	11.18	MILES
ID17050112SW014_02	Granite Creek - 1st and 2nd order	65.84	MILES
ID17050112SW014_03	Granite, Woof, and Clear Creeks - 3rd order sections	3.23	MILES
ID17050112SW014_04	Granite Creek - 4th order (Woof Creek to mouth)	5.19	MILES

ID17050112SW016_02	Daggett Creek and tributaries - 1st & 2nd order	13.8	MILES
ID17050112SW016_03	Daggett Creek - 3rd order (Sheep Creek to mouth)	3.77	MILES
ID17050112SW017_02	Robie Creek and tributaries - 1st and 2nd order	17.79	MILES
ID17050112SW017_03	Robie Creek - 3rd order (Karney Creek to mouth)	4.55	MILES

17050113 South Fork Boise

ID17050113SW001_03	Rattlesnake Creek - 3rd order	0.87	MILES
ID17050113SW001_06	SF Boise River (tiny segment above Arrowrock)	0.53	MILES
ID17050113SW001L_0L	Arrowrock Reservoir (South Fork Boise River arm)	820.39	ACRES
ID17050113SW002b_03	Willow Creek - 3rd order below Cottonwood Creek	7.43	MILES
ID17050113SW003_02	Wood Creek - 1st and 2nd order	29.12	MILES
ID17050113SW003_03	Wood Creek - 3rd order (Deadman Creek to Willow Creek)	2.02	MILES
ID17050113SW004_02	SF Boise River (Anderson Dam to Arrowrock) - 1st & 2nd orde	153.4	MILES
ID17050113SW004_06	South Fork Boise River - Anderson Dam to Arrowrock Reservo	31.58	MILES
ID17050113SW005_02	Tributaries to Anderson Ranch Reservoir - 1st and 2nd order	81.96	MILES
ID17050113SW005_03	Castle Creek - 3rd order	1.52	MILES
ID17050113SW010_02	Lime and North Fork Lime Creeks - 1st and 2nd order	99.92	MILES
ID17050113SW010_03	North and Middle Fork Lime Creeks - 3rd order sections	14.24	MILES
ID17050113SW010_04	Lime Creek - 4th order (NF Lime Creek to Moores Creek)	7.13	MILES
ID17050113SW010_04a	Moores Creek - 4th order (Big Springs Creek to mouth)	2.69	MILES
ID17050113SW011_02	South Fork Lime Creek - 1st and 2nd order	70.94	MILES
ID17050113SW011_03	South Fork Lime Creek - 3rd order	9.37	MILES
ID17050113SW012_02	Deer Creek - 1st and 2nd order	24.86	MILES
ID17050113SW012_03	Deer Creek - 3rd order	1.28	MILES
ID17050113SW013_02	South Fork Boise River - 1st and 2nd order	69.42	MILES
ID17050113SW013_05	SF Boise River - Willow Creek to Anderson Ranch Reservoir	21.88	MILES
ID17050113SW014_02	Grouse Creek - 1st and 2nd order	17.63	MILES
ID17050113SW015_02	SF Boise River - 1st and 2nd order tribs,Willow to Big Smoky	60.98	MILES
ID17050113SW015_03	Kelley Creek - 3rd order (EF Kelley Creek to SF Boise River)	0.64	MILES
ID17050113SW016_02	Beaver Creek - entire drainage	9.54	MILES
ID17050113SW017_03	Boardman Creek - 3rd order (Smoky Dome Canyon to mouth)	5	MILES
ID17050113SW018_02	Little Smoky Creek - 1st and 2nd order	136.5	MILES
ID17050113SW018_03	Little Smoky, Salt & Grindstone Creeks - 3rd order sections	10.99	MILES
ID17050113SW018_04	Little Smoky Creek - 4th order (Grindstone to Big Smoky Cr.)	9.61	MILES
ID17050113SW018_05	Big Smoky Creek - 5th order (Little Smoky to SF Boise River)	2.79	MILES
ID17050113SW019_02	Big Smoky Creek - 1st and 2nd order except Paradise Creek	117.59	MILES
ID17050113SW019_04	Big Smoky Creek - 4th order	15.79	MILES
ID17050113SW020_02	Paradise Creek - entire drainage	14.39	MILES
ID17050113SW021_02	South Fork Boise River - 1st and 2nd order	72.22	MILES
ID17050113SW021_03	South Fork Boise River - 3rd order	2.95	MILES

ID17050113SW021_04	South Fork Boise River - 4th order	15.16	MILES
ID17050113SW022_03	Johnson Creek - 3rd order	5.54	MILES
ID17050113SW023_02	Ross Fork - 1st and 2nd order	31.43	MILES
ID17050113SW023_03	Ross Fork - 3rd order (SF Ross Creek to SF Boise River)	3.7	MILES
ID17050113SW024_02	Skeleton Creek - 1st and 2nd order	27.19	MILES
ID17050113SW024_03	Skeleton Creek - 3rd order (East Fork to mouth)	6.01	MILES
ID17050113SW025_02	Willow Creek and tributaries - 1st and 2nd order	22.8	MILES
ID17050113SW025_03	Willow Creek - 3rd order (Haypress Creek to mouth)	5.62	MILES
ID17050113SW026_02	Shake Creek - entire drainage	12.18	MILES
ID17050113SW027_02	Feather River - 1st and 2nd order	80.46	MILES
ID17050113SW027_03	Elk Creek and Feather River - 3rd order sections	4.28	MILES
ID17050113SW027_04	Feather River - 4th order (Elk Creek to mouth)	6.01	MILES
ID17050113SW028_02	Trinity Creek and tributaries - 1st and 2nd order	50.39	MILES
ID17050113SW028_03	Parks and Trinity Creeks - 3rd order	0.8	MILES
ID17050113SW028_04	Trinity Creek - 4th order (Parks Creek to mouth)	4.76	MILES
ID17050113SW029_02	Green Creek - entire drainage	7.27	MILES
ID17050113SW030_02	Dog Creek - entire drainage	11.13	MILES
ID17050113SW031_03	Fall and Tally Creeks - 3rd order sections	4.81	MILES
ID17050113SW031_04	Fall Creek - 4th order (Tally Creek to mouth)	4.99	MILES
ID17050113SW033_02	Rattlesnake Creek and tributaries - 1st and 2nd order	42.05	MILES
ID17050113SW033_03	Rattlesnake Creek - 3rd order	10.88	MILES

17050114 Lower Boise

ID17050114SW013_03	Dry, Currant and Spring Valley Creeks - 3rd order sections	10.09	MILES

17050120 South Fork Payette

ID17050120SW001_03	South Fork Payette River - 3rd order	5.19	MILES
ID17050120SW001_04	South Fork Payette River - 4th order	35.4	MILES
ID17050120SW002_02	Rock Creek - 1st and 2nd order	25.69	MILES
ID17050120SW002_03	Rock Creek - 3rd order	0.91	MILES
ID17050120SW003_02	Tenmile Creek - entire drainage	35.87	MILES
ID17050120SW004_02	Wapiti Creek - entire drainage	14.64	MILES
ID17050120SW005_02	SF Payette R - 1st and 2nd order above and inc. Trail Cr.	59.84	MILES
ID17050120SW005_03	SF Payette River - 3rd order (Benedict Creek to Baron Creek)	15.13	MILES
ID17050120SW005_04	South Fork Payette River - Baron Creek to Trail Creek	0.73	MILES
ID17050120SW007_03	Baron Creek - 3rd order (North Fork Baron Creek to mouth)	2.64	MILES
ID17050120SW008_02	Bear Creek - entire watershed	5.53	MILES
ID17050120SW009_02	Canyon Creek - 1st and 2nd order	28.88	MILES
ID17050120SW009_03	Canyon Creek - 3rd order	6.54	MILES
ID17050120SW010_02	Warm Spring Creek - 1st and 2nd order	54.02	MILES

ID17050120SW010_03	Warm Spring and Gates Creeks - 3rd order	12.96	MILES
ID17050120SW011_02	Eightmile and EF Eightmile Creeks - 1st and 2nd order	30.39	MILES
ID17050120SW011_03	Eightmile Creek - 3rd order (East Fork to mouth)	1.25	MILES
ID17050120SW012_02	Fivemile Creek - entire watershed	13.66	MILES
ID17050120SW013_02	Clear Creek and tributaries - 1st and 2nd order	64.26	MILES
ID17050120SW013_03	Clear Creek - 3rd order (South Fork Clear Creek to mouth)	17.06	MILES
ID17050120SW014_02	Deadwood River - 1st and 2nd order below Deadwood Dam	76.26	MILES
ID17050120SW015_02	Whitehawk and NF Whitehawk Creeks - 1st and 2nd order	19.5	MILES
ID17050120SW015_03	Whitehawk Creek - 3rd order	3.18	MILES
ID17050120SW016_02	Warm Springs Cr. and tributaries - 1st and 2nd order	20.48	MILES
ID17050120SW016_03	Warm Springs Creek - 3rd order	1.23	MILES
ID17050120SW017_02	Wilson Creek - entire watershed	11.86	MILES
ID17050120SW018_02	Deadwood Reservoir - 1st & 2nd order tributaries	51.09	MILES
ID17050120SW018L_0L	Deadwood Reservoir	3017.14	ACRES
ID17050120SW019_02	Deadwood River - 1st and 2nd order above the Reservoir	54.71	MILES
ID17050120SW019_03	Deadwood River above Deadwood Dam - 3rd order	16.73	MILES
ID17050120SW020_02	Scott Creek - entire drainage	19.38	MILES
ID17050120SW021_02	Big Pine Creek - 1st and 2nd order tributaries	20.74	MILES
ID17050120SW021_03	Big Pine Creek - 3rd order (East Fork to mouth)	2.09	MILES

17050121 Middle Fork Payette

ID17050121SW001_02	Middle Fork Payette River - 1st and 2nd order	48.31	MILES
ID17050121SW002_02	Anderson Creek and tributaries - 1st and 2nd order	38.36	MILES
ID17050121SW002_03	Anderson Creek - 3rd order section	10	MILES
ID17050121SW003_03	Lightning Creek - 3rd order	8.29	MILES
ID17050121SW004_02	Big Bulldog Creek - entire watershed	19.64	MILES
ID17050121SW005_02	Upper MF Payette River - 1st and 2nd order	122.02	MILES
ID17050121SW006_02	Rattlesnake Creek - entire drainage	9.81	MILES
ID17050121SW007_03	Silver Creek - 3rd order (Peace Creek to mouth)	6.25	MILES
ID17050121SW008_02	Peace and Valley Creek - 1st and 2nd order sections	13.61	MILES
ID17050121SW009_02	Bull and Sixteen-to-One Creeks - 1st and 2nd order	41.6	MILES
ID17050121SW010_02	Scriver Creek and tributaries - 1st and 2nd order	35.37	MILES
ID17050121SW010_03	Scriver Creek - 3rd order (West Fork to mouth)	6.08	MILES

17050122 Payette

ID17050122SW002_06	Black Canyon Reservoir	1028.87	ACRES
ID17050122SW003_02a	Dry Buck, Peterson & Fleming Creeks - 1st & 2nd order	29.4	MILES
ID17050122SW003_06	Payette River - NF/SF Confluence to Black Canyon Reservoir	38.17	MILES
ID17050122SW004_03	Shafer Creek - 3rd order (Bogus Creek to Harris Creek)	9.49	MILES
ID17050122SW004_04	Shafer Creek - 4th order (Harris Creek to mouth)	3.71	MILES

ID17050122SW005_02	Harris Creek - 1st and 2nd order	33.95	MILES
ID17050122SW005_03	Harris Creek - 3rd order (Shoemaker Creek to Shafer Creek)	6.32	MILES
ID17050122SW010_02	Squaw Creek - 1st and 2nd order forested	47.74	MILES
ID17050122SW010_02a	Squaw Creek -1st and 2nd order rangeland	137.47	MILES
ID17050122SW010_03	Squaw, Third Fork Squaw and Coon Creeks - 3rd order	18.75	MILES
ID17050122SW010_04	Squaw Creek - 4th order	24.28	MILES
ID17050122SW010_05	Squaw Creek - 5th order	24.23	MILES
ID17050122SW011_02	Little Squaw Creek - 1st and 2nd order, except Soldier Creek	54.22	MILES
ID17050122SW011_03	Little Squaw Creek - 3rd order (North Fork to Soldier Creek)	9.69	MILES
ID17050122SW012_02	Soldier Creek - 1st and 2nd order	20.5	MILES
ID17050122SW013_02	Pine Creek - 1st and 2nd order	34.26	MILES
ID17050122SW013_03	Pine Creek - 3rd order (between Cottonwood and Squaw Cree	2.65	MILES
ID17050122SW014_02	Second Fork Squaw Creek - 1st and 2nd order	42.46	MILES
ID17050122SW014_03	Second Fork Squaw Creek - 3rd order section	8.42	MILES
ID17050122SW015_03	Bissel Creek - upper 3rd order	5.71	MILES
ID17050122SW018_03	Little Willow Creek - Paddock Valley Dam to Indian Creek	5.85	MILES
ID17050122SW020L_0L	Paddock Valley Reservoir	1191.04	ACRES

17050123 North Fork Payette

ID17050123SW001_02	North Fork Payette River - 1st and 2nd order	141.21	MILES
ID17050123SW004_02	Big Creek - 1st and 2nd order	55.48	MILES
ID17050123SW004_03	Big Creek - upper 3rd order (Snag Creek to Horsethief Creek)	8.72	MILES
ID17050123SW005_02	Horsethief Creek- entire drainage above Horsethief Reservoir	3.47	MILES
ID17050123SW008_02	Gold Fork - 1st and 2nd order	64.32	MILES
ID17050123SW008_03	NF and SF Gold Fork - 3rd order sections	3.3	MILES
ID17050123SW008_04	Gold Fork - North Fork to Kenally Creek	5.52	MILES
ID17050123SW009_02	Flat Creek - entire drainage	10.19	MILES
ID17050123SW010_02	Kennally, Rapid and Sloans Creeks - 1st and 2nd order	92.18	MILES
ID17050123SW010_03	Kennally and Rapid Creeks - 3rd order	9.25	MILES
ID17050123SW010_04	Kennally Creek - Rapid Creek to Gold Fork River	6.22	MILES
ID17050123SW011_02a	Boulder/Willow Creeks - 1st and 2nd order forested sections	43.81	MILES
ID17050123SW013_02	Little Payette Lake - 1st and 2nd order tributaries	3.58	MILES
ID17050123SW013L_0L	Little Payette Lake	1440.62	ACRES
ID17050123SW014_02	Lake Fork above Little Payette Lake - 1st & 2nd tributaries	63.53	MILES
ID17050123SW014_03	Lake Fork - Browns Pond to Little Payette Lake	2.16	MILES
ID17050123SW014_03a	Lake Fork - 3rd order (South Fork to Browns Pond)	2.56	MILES
ID17050123SW016_04	North Fork Payette River - Payette Lake to Cascade Reservoir	20.43	MILES
ID17050123SW017_02	Payette Lake - Westside tributaries inc. Deadhorse & Landing	15.23	MILES
ID17050123SW018_03	North Fork Payette River - 3rd order	11.37	MILES
ID17050123SW019_02	Upper Payette Lake tributaries - Cougar and Camp Creeks	6.64	MILES

ID17050123SW019L_0L	Upper Payette Lake	301.47	ACRES
ID17050123SW020_02	Twentymile Creek - 1st and 2nd order	10.75	MILES
ID17050123SW020_03	Twentymile Creek - 3rd order	3.2	MILES
ID17050123SW021_02	NF Payette River above Upper Payette Lake - entire drainage	18.33	MILES
ID17050123SW022_02	Fisher Creek - 1st and 2nd order	22.75	MILES

17050124 Weiser

ID17050124SW004L_0L	Crane Creek Reservoir	2315.37	ACRES
ID17050124SW007_02	Weiser River - 1st and 2nd order (upstream of Keithly Creek)	206.67	MILES
ID17050124SW007_03	Weiser River - 3rd order (Price Valley to East Fork)	16.9	MILES
ID17050124SW007_04	Weiser River - East Fork to West Fork	8.43	MILES
ID17050124SW007_04a	Weiser River - West Fork to Hornet Creek	7.87	MILES
ID17050124SW008_02	Little Weiser River tributaries - 1st and 2nd order	79.79	MILES
ID17050124SW008_03a	Little Weiser River - upper 3rd order (forested)	6.53	MILES
ID17050124SW011_02	Anderson Creek - entire drainage	16.22	MILES
ID17050124SW014_02	Middle Fork Weiser River - 1st and 2nd order	78.82	MILES
ID17050124SW014_03a	Middle Fork Weiser River - upper 3rd order (forested)	11.98	MILES
ID17050124SW015_02	Cottonwood Creek - 1st and 2nd order	18.18	MILES
ID17050124SW015_03	Cottonwood Creek - 3rd order (North Fork to mouth)	7.37	MILES
ID17050124SW016_02	East Fork Weiser River - 1st and 2nd order	32.07	MILES
ID17050124SW016_03	East Fork Weiser River - Fourth Gulch to Weiser River	2.29	MILES
ID17050124SW017_02	West Fork Weiser River - 1st and 2nd order except Lost Creek	37.38	MILES
ID17050124SW017_03	West Fork Weiser River - 3rd order (Corral Creek to mouth)	12.76	MILES
ID17050124SW018_02	Lost Creek - Lost Valley Reservoir Dam to mouth	14.94	MILES
ID17050124SW020_02	Lost Creek - entire drainage above Lost Valley Reservoir	26.18	MILES
ID17050124SW021_02	Hornet Creek - 1st and 2nd order	96.34	MILES
ID17050124SW021_04	Hornet Creek - 4th order (North Fork to Weiser River)	7.88	MILES
ID17050124SW022_02	Johnson Creek - 1st & 2nd order	16.52	MILES
ID17050124SW022_03	Johnson Creek - 3rd order (Orchid Canyon to mouth)	6.21	MILES
ID17050124SW023_02	Goodrich Creek - entire drainage	20.26	MILES
ID17050124SW024_02	Cow Creek - entire drainage	14.46	MILES
ID17050124SW025_02	Rush Creek and Beaver Creeks - 1st and 2nd order	36.09	MILES
ID17050124SW027_02	Pine Creek - 1st and 2nd order	82	MILES
ID17050124SW027_03	Pine Creek - 3rd order	14.67	MILES
ID17050124SW027_04	Pine Creek - 4th order (West Pine Creek to Weiser River)	3.77	MILES
ID17050124SW028_02	Keithly Creek & tributaries - 1st and 2nd order	61.87	MILES
ID17050124SW031_03	Mann Creek - lower 3rd order	0.62	MILES
ID17050124SW031L_0L	Mann Creek Reservoir	269.34	ACRES
ID17050124SW032_02	Mann Creek - 1st and 2nd order above Mann Creek Reservoir	57.21	MILES
ID17050124SW032_03	Mann Creek - 3rd order above Mann Creek Reservoir	10.13	MILES

17050201 Brownlee Reservoir

ID17050201SW001_02	Tributaries to Snake River - 1st and 2nd order	33.29	MILES
ID17050201SW009_02	Grouse Creek - 1st and 2nd order	14.5	MILES
ID17050201SW011_03	Wolf Creek - 3rd order	3.9	MILES
ID17050201SW013_02	Sturgill Creek - 1st and 2nd order	27.51	MILES
ID17050201SW014_02	Brownlee Creek & tributaries - 1st & 2nd order	64.04	MILES
ID17050201SW014_03	West & Middle Brownlee Creeks - 3rd order sections	4.33	MILES
ID17050201SW014_04	Brownlee Creek - 4th order	2.06	MILES
ID17050201SW017_02	Indian Creek - 1st and 2nd order	45.04	MILES
ID17050201SW017_03	Indian Creek - 3rd order (Huntley Gulch to mouth)	9.3	MILES

Upper Snake

17040104 Palisades

ID17040104SK003_02	Snake River - Fall Creek to Black Canyon Creek	76.04	MILES
ID17040104SK004_02	Pritchard Creek - source to mouth	16.36	MILES
ID17040104SK005_04	Fall Creek - South Fork Fall Creek to mouth	5.81	MILES
ID17040104SK007_02	South Fork Fall Creek - source to mouth	17.47	MILES
ID17040104SK007_03	South Fork Fall Creek - source to mouth	5.07	MILES
ID17040104SK014_04	McCoy Creek - Fish Creek to Palisades Reservoir	4.99	MILES
ID17040104SK015_04	McCoy Creek - Iowa Creek to Fish Creek	4.75	MILES
ID17040104SK019_02	McCoy Creek - source to Clear Creek	16.39	MILES
ID17040104SK019_03	McCoy Creek - source to Clear Creek	3.66	MILES
ID17040104SK021_03	Fish Creek - source to mouth	2.57	MILES
ID17040104SK024_03	Indian Creek - Idaho/Wyoming border to Palisades Reservoir	3.21	MILES
ID17040104SK025_04	Big Elk Creek - Idaho/Wyoming border to Palisades Reservoir	6.32	MILES
ID17040104SK027_03	Palisades Creek - source to mouth	16.44	MILES
ID17040104SK029_02	Pine Creek - source to mouth	82.8	MILES
ID17040104SK031_03	Burnt Canyon Creek - source to mouth	2.97	MILES

17040105 Salt

ID17040105SK001_02a	King Creek	5.66	MILES
ID17040105SK002_02	Jackknife Creek - source to Idaho/Wyoming border	28.22	MILES
ID17040105SK002_02a	Deep Creek	9.58	MILES
ID17040105SK002_02b	Trail Creek	12.08	MILES
ID17040105SK002_03	Jackknife Creek - source to Idaho/Wyoming border	6.65	MILES
ID17040105SK002_03a	Squaw Creek	3.1	MILES
ID17040105SK003_02f	Corral Creek	3.7	MILES
ID17040105SK003_02h	Marshall Canyon	2.11	MILES

ID17040105SK003_03	Tincup Creek - source to Idaho/Wyoming border	19.4	MILES
ID17040105SK004_02	South Fork Tincup Creek - source to mouth	12.92	MILES
ID17040105SK004_02a	Brush Creek	3.59	MILES
ID17040105SK004_02b	Crooked Creek	3.36	MILES
ID17040105SK005_02a	Limekiln Creek	4.29	MILES
ID17040105SK005_02b	Toms Canyon	7.19	MILES
ID17040105SK005_02c	Deer Creek	4.8	MILES
ID17040105SK006_02a	Flat Valley Creek	2.82	MILES
ID17040105SK006_02b	Bechler Creek	5.41	MILES
ID17040105SK006_02e	Hyde Canyon	7.04	MILES
ID17040105SK006_02h	Mill Canyon	3.81	MILES
ID17040105SK006_02i	Horse Creek	10.18	MILES
ID17040105SK006_03	upper Stump Creek	3.04	MILES
ID17040105SK006_03a	lower Boulder Creek	2.88	MILES
ID17040105SK007_02d	Tygee Creek	18.63	MILES
ID17040105SK007_02e	upper Webster Creek	9.15	MILES
ID17040105SK008_02b	Clear Creek	4.5	MILES
ID17040105SK008_03a	Wells Canyon	1.16	MILES
ID17040105SK009_02a	upper Sage Creek	5.18	MILES
ID17040105SK010_02b	North Fork Deer Creek	3.18	MILES
ID17040105SK010_03	Deer Creek - source to mouth	3.17	MILES

17040202 Upper Henrys

ID17040202SK007_02	Porcupine Creek - source to mouth	16.34	MILES
ID17040202SK008_03	Rock Creek - Wyoming Creek to mouth	7.72	MILES
ID17040202SK010_02	Rock Creek - source to Wyoming Creek	9.48	MILES
ID17040202SK011_03	Robinson Creek - Idaho/Wyoming border and sources west of	13.65	MILES
ID17040202SK012_02	Snow Creek - source to mouth	16.54	MILES
ID17040202SK013_02	Fish Creek - source to mouth	24.39	MILES
ID17040202SK014_05	Henrys Fork - Thurman Creek to Warm River	26.58	MILES
ID17040202SK021_02	Henrys Fork - Confluence of Big Springs and Henrys Lake Out	18.4	MILES
ID17040202SK024_02	Thirsty Creek - Idaho/ Wyoming border to mouth	37.73	MILES
ID17040202SK025_04	Henrys Lake Outlet - Henrys Lake Dam to mouth	20.07	MILES
ID17040202SK027_03	Reas Pass Creek - source to sink	1.99	MILES
ID17040202SK028_02	Jones Creek - source to mouth	7.16	MILES
ID17040202SK029_02	Jesse Creek - source to mouth	5.85	MILES
ID17040202SK031_02	Tygee Creek - source to sink	10.45	MILES
ID17040202SK036_02	Duck Creek - source to mouth	14.53	MILES
ID17040202SK040_02	Hotel Creek - source to mouth	21.76	MILES
ID17040202SK040_03	Hotel Creek - source to mouth	3.52	MILES

ID17040202SK041_02	Yale Creek - source to mouth	11.25	MILES
ID17040202SK042_02	Blue Creek - source to mouth	10.65	MILES
ID17040202SK047_02	Myers Creek - source to mouth	20.78	MILES
ID17040202SK048_03	Sheridan Creek - source to Kilgore Road (T13N, R41E, Sec. 0	3.88	MILES

17040203 Lower Henrys

ID17040203SK005_05	Falls River - Stream order 5 segments	4.88	MILES
ID17040203SK006_04	Conant Creek - Idaho/Wyoming border to Squirrel Creek	6.21	MILES
ID17040203SK008_03	Squirrel Creek - Idaho/Wyoming border to mouth	17.09	MILES

17040204 Teton

ID17040204SK001_05	South Fork Teton River - Teton River Forks to Henrys Fork	33.16	MILES
ID17040204SK008_02	Canyon Creek - Warm Creek to mouth	116.39	MILES
ID17040204SK008_04	Canyon Creek - Warm Creek to mouth	11.25	MILES
ID17040204SK013_02	Milk Creek - source to mouth	42.93	MILES
ID17040204SK022_02	Horseshoe Creek - source to pipeline diversion (SE ¼, NW ¼,	15.29	MILES
ID17040204SK022_03	Horseshoe Creek - source to pipeline diversion (SE ¼, NW ¼,	2.23	MILES
ID17040204SK023_02	Twin Creek - source to mouth	9.94	MILES
ID17040204SK024_03	Mahogany Creek - pipeline diversion (NE ¼, Sec. 27, T4N, R4	7	MILES
ID17040204SK027_02	Henderson Creek - source to sink	2.92	MILES
ID17040204SK030_02	Patterson Creek - source to pump diversion (SE ¼, Sec. 31, T	5.21	MILES
ID17040204SK033_02	Little Pine Creek - source to mouth	11.6	MILES
ID17040204SK035_02	Trail Creek - Trail Creek pipeline diversion (SW ¼, SE ¼, Se	7.87	MILES
ID17040204SK037_02	Game Creek - source to diversion (SW ¼, SW ¼, Sec. 17, T3	0.72	MILES
ID17040204SK038_02	Trail Creek - Idaho/Wyoming border to Trail Creek pipeline d	7.44	MILES
ID17040204SK038_03	Trail Creek - Idaho/Wyoming border to Trail Creek pipeline d	3	MILES
ID17040204SK039_02	Moose Creek - Idaho/Wyoming border to mouth	1.28	MILES
ID17040204SK047_02	Teton Creek - Highway 33 bridge to mouth, including spring c	6.34	MILES
ID17040204SK048_02	Teton Creek - Idaho/Wyoming border to Highway 33 bridge	5.73	MILES
ID17040204SK059_03	Badger Creek - source to diversion (NW ¼, SW ¼, Sec. 9, T6	2.18	MILES
ID17040204SK063_04	Bitch Creek - Swanner Creek to mouth	7.41	MILES
ID17040204SK065_03	Bitch Creek - Idaho/Wyoming border to Swanner Creek	9.08	MILES

17040205 Willow

ID17040205SK001_05	Willow Creek - Ririe Reservoir Dam to Eagle Rock Canal	5.47	MILES
ID17040205SK002_05L	Ririe Reservoir (Willow Creek)	1416.52	ACRES
ID17040205SK009_03	Mud Creek - source to mouth	1.09	MILES
ID17040205SK023_02	Gravel Creek - source to mouth	21.55	MILES

17040206 American Falls

ID17040206SK005_02	Sunbeam Creek - source to mouth	24.03	MILES

ID17040206SK010_02a	Crystal Creek	6.82	MILES
ID17040206SK012_02	Midnight Creek - source to mouth	14.67	MILES
ID17040206SK013_02	Michaud Creek - source to mouth	18.64	MILES

17040207 Blackfoot

ID17040207SK002_02a	Beaver Creek	7.11	MILES
ID17040207SK002_02c	Trail Creek	5.15	MILES
ID17040207SK010_02	Mill Canyon (west)	35.54	MILES
ID17040207SK017_02a	upper Timothy Creek	4.95	MILES
ID17040207SK020_02	Browns Canyon	10.04	MILES
ID17040207SK027_02a	Horse Creek	11.07	MILES
ID17040207SK028_02	Miner Creek - source to mouth	15.69	MILES
ID17040207SK028_02a	Menassa Creek	2.4	MILES

17040208 Portneuf

ID17040208SK001_02a	Cusick Creek	4.94	MILES
ID17040208SK006_02b	upper Yago Creek	4.5	MILES
ID17040208SK006_02c	lower Yago Creek	3.59	MILES
ID17040208SK006_02d	upper Aspen Creek	5.05	MILES
ID17040208SK006_02e	Left Hand Fork Marsh Creek	6.9	MILES
ID17040208SK006_02f	Potter Creek	5.18	MILES
ID17040208SK015_02a	Mill Creek	13.05	MILES
ID17040208SK016_02a	King Creek	21.9	MILES
ID17040208SK016_02d	Harkness Creek	5.68	MILES
ID17040208SK016_02e	Robbers Roost Creek - headwaters to Portneuf River	7.16	MILES
ID17040208SK016_02f	Upper Rock Creek	4.6	MILES
ID17040208SK016_02g	Lower Rock Creek	6.65	MILES
ID17040208SK016_03a	Fish Creek	4.8	MILES

17040209 Lake Walcott

ID17040209SK003_02	Marsh Creek - source to mouth	170.84	MILES
ID17040209SK005_07	Snake River - Raft River to Lake Walcott	4.57	MILES
ID17040209SK006_07	Snake River - Rock Creek to Raft River	13.14	MILES
ID17040209SK008_03	Rock Creek - confluence of South and East Fork Rock Creeks	7.64	MILES
ID17040209SK011_07	Snake River - American Falls Reservoir Dam to Rock Creek	13.57	MILES
ID17040209SK012_02	Warm Creek - source to mouth	23.06	MILES

17040210 Raft

ID17040210SK004_02	Conner Creek - source to mouth	23.69	MILES
ID17040210SK011_02	Grape Creek - source to mouth	62.16	MILES
ID17040210SK012_02	Edwards Creek - source to mouth	68.21	MILES

ID17040210SK021_03	Sublett Creek - source to Sublett Reservoir	5.9	MILES

17040211 Goose

ID17040211SK000_05	Unclassified Waters	4.34	MILES
ID17040211SK001_02	Big Cottonwood Creek - source to mouth	64.96	MILES
ID17040211SK001_03	Big Cottonwood Creek - source to mouth	17.48	MILES
ID17040211SK005_02	Goose Creek - Beaverdam Creek to Lower Goose Creek Res	86.73	MILES
ID17040211SK008_03	Goose Creek - source to Idaho/Utah border	3.13	MILES
ID17040211SK008_04	Goose Creek - source to Idaho/Utah border	6.07	MILES
ID17040211SK010_02	Blue Hill Creek and tribs. to Goose Creek	17.95	MILES
ID17040211SK010_03	Blue Hill Creek - source to mouth	2.96	MILES
ID17040211SK013_02	Mill Creek - source to mouth	53.09	MILES
ID17040211SK013_03	Mill Creek - source to mouth	4.31	MILES

17040212 Upper Snake-Rock

ID17040212SK004_03	Tuana Gulch - source to mouth	14.11	MILES
ID17040212SK017_02	Fifth Fork Rock Creek - source to mouth	26.23	MILES
ID17040212SK018_02	Rock Creek - source to Fifth Fork Rock Creek	54.36	MILES
ID17040212SK018_03	Rock Creek - source to Fifth Fork Rock Creek	6.64	MILES
ID17040212SK018_04	Rock Creek - source to Fifth Fork Rock Creek	8.12	MILES
ID17040212SK022_02	Dry Creek - source to mouth	45.86	MILES
ID17040212SK024_02	East Fork Dry Creek - source to mouth	14.76	MILES
ID17040212SK039_03	Deer Creek - source to mouth trib to Clover Creek	0.87	MILES

17040214 Beaver-Camas

ID17040214SK001_06	Camas Creek - Beaver Creek to Mud Lake	18.36	MILES
ID17040214SK006_02	Ching Creek - source to mouth	83.98	MILES
ID17040214SK012_02	West Camas Creek - Targhee National Forest Boundary (T13	12.84	MILES
ID17040214SK022_02	Idaho Creek - source to mouth	8.68	MILES
ID17040214SK023_02	Pleasant Valley Creek - source to mouth	23.34	MILES

17040216 Birch

ID17040216SK002_04	Birch Creek - Pass Creek to Reno Ditch	9.09	MILES
ID17040216SK009_02	Willow Creek - source to mouth	25.34	MILES
ID17040216SK015_03	Pass Creek - source to mouth	5.98	MILES

17040217 Little Lost

ID17040217SK001_02	Little Lost River - canal (T06N, R28E) to playas	160.25	MILES
ID17040217SK001_02a	Warm Spring Creek	8.01	MILES
ID17040217SK004_02	North Creek - source to mouth	23.74	MILES
ID17040217SK005_02	Uncle Ike Creek - source to mouth	30.62	MILES

ID17040217SK008_02	Badger Creek - source to mouth	14.51	MILES
ID17040217SK008_03	Badger Creek - source to mouth	6.55	MILES
ID17040217SK012_02	Sawmill Creek - Warm Creek to mouth	33.16	MILES
ID17040217SK013_02	Warm Creek - source to mouth	4.97	MILES
ID17040217SK016_02	Bear Creek - source to mouth	4.67	MILES
ID17040217SK018_02	Timber Creek - source to mouth	10.8	MILES
ID17040217SK019_02	Summit Creek - source to mouth	47.38	MILES

17040218 Big Lost

ID17040218SK019_02	Rock Creek - source to mouth	16.8	MILES
ID17040218SK027_02	North Fork Big Lost River - source to mouth	67.88	MILES
ID17040218SK028_03	Summit Creek - source to mouth	0.55	MILES
ID17040218SK029_02	Kane Creek - source to mouth	18.06	MILES
ID17040218SK030_02	Wildhorse Creek - Fall Creek to mouth	7.56	MILES
ID17040218SK031_02	Wildhorse Creek - source to Fall Creek	26.83	MILES
ID17040218SK032_04	Fall Creek - source to mouth	2.22	MILES
ID17040218SK036_02	Star Hope Creek - source to Lake Creek	20.42	MILES
ID17040218SK037_02	Muldoon Canyon Creek - source to mouth	25.94	MILES
ID17040218SK038_02	Lake Creek - source to mouth	14.27	MILES
ID17040218SK040_02	Cabin Creek - source to mouth	13.82	MILES
ID17040218SK044_02	Navarre Creek - source to mouth	20.87	MILES
ID17040218SK044_03	Navarre Creek - source to mouth	3.19	MILES
ID17040218SK045_02	Alder Creek - source to mouth	64.5	MILES
ID17040218SK045_03	Alder Creek - source to mouth	9.37	MILES
ID17040218SK046_05	Antelope Creek - Spring Creek to mouth	26.72	MILES
ID17040218SK050_04	Lupine Creek - source to mouth	4.72	MILES
ID17040218SK051_02	Left Fork Cherry Creek - source to mouth	16.19	MILES
ID17040218SK052_02	Antelope Creek - Iron Bog Creek to Dry Fork Creek	24.21	MILES
ID17040218SK052_04	Antelope Creek - Iron Bog Creek to Dry Fork Creek	12.45	MILES
ID17040218SK053_02	Bear Creek - source to mouth	23.57	MILES
ID17040218SK054_03	Iron Bog Creek - confluence of Left and Right Fork Iron Bog	2.15	MILES
ID17040218SK055_02	Right Fork Iron Bog Creek - source to mouth	16.3	MILES
ID17040218SK056_02	Left Fork Iron Bog Creek - source to mouth	6.78	MILES
ID17040218SK057_03	Antelope Creek - source to Iron Bog Creek	3.49	MILES

17040219 Big Wood

ID17040219SK007_02	Big Wood River - North Fork Big Wood River to Seamans Cre	82.69	MILES
ID17040219SK007_03	Big Wood River - North Fork Big Wood River to Seamans Cre	8.5	MILES
ID17040219SK007_04	Big Wood River - North Fork Big Wood River to Seamans Cre	8.75	MILES
ID17040219SK010_04	East Fork Wood River - Hyndman Creek to mouth	6.22	MILES

ID17040219SK012_02	Hyndman Creek - source Creek to mouth	35.52	MILES
ID17040219SK012_03	Hyndman Creek - source Creek to mouth	8.1	MILES
ID17040219SK013_04	Trail Creek - Corral Creek to mouth	9.95	MILES
ID17040219SK014_02	Trail Creek - source to and including Corral Creek	60.06	MILES
ID17040219SK014_03	Trail Creek - source to and including Corral Creek	6.26	MILES
ID17040219SK017_02	North Fork Big Wood River - source to mouth	38.7	MILES
ID17040219SK017_03	North Fork Big Wood River - source to mouth	5.67	MILES
ID17040219SK018_02	Big Wood River - source to North Fork Big Wood River	115.26	MILES
ID17040219SK018_03	Big Wood River - source to North Fork Big Wood River	6.84	MILES
ID17040219SK018_04	Big Wood River - source to North Fork Big Wood River	13.06	MILES
ID17040219SK019_02	Boulder Creek - source to mouth	11.12	MILES
ID17040219SK020_02	Prairie Creek - source to mouth	17.83	MILES
ID17040219SK020_03	Prairie Creek - source to mouth	2.64	MILES
ID17040219SK021_02	Baker Creek - source to mouth	50.55	MILES
ID17040219SK021_03	Baker Creek - source to mouth	7.75	MILES
ID17040219SK022_02	Fox Creek - source to mouth	9.67	MILES
ID17040219SK023_02	Warm Springs Creek - Thompson Creek to mouth	40.42	MILES
ID17040219SK023_04	Warm Springs Creek - Thompson Creek to mouth	13.5	MILES
ID17040219SK024_04	Warm Springs Creek - source to and including Thompson Cre	5.12	MILES
ID17040219SK026_02	Deer Creek - source to mouth	61.66	MILES
ID17040219SK026_03	Deer Creek - source to mouth	12.85	MILES

17040220 Camas

ID17040220SK005_02	Willow Creek - source to Beaver Creek	53.19	MILES
ID17040220SK005_03	Willow Creek - source to Beaver Creek	4.84	MILES
ID17040220SK011_03	Soldier Creek - Wardrop Creek to mouth	5.91	MILES
ID17040220SK012_02	Soldier Creek - source to and including Wardrop Creek	60.9	MILES
ID17040220SK012_03	Soldier Creek - source to and including Wardrop Creek	6.52	MILES
ID17040220SK016_02	East Fork Corral Creek - source to mouth	14.59	MILES
ID17040220SK017_02	West Fork Corral Creek - source to mouth	10.3	MILES
ID17040220SK019_02	Chimney Creek - source to mouth	31.98	MILES

17040221 Little Wood

ID17040221SK013_05	Little Wood River - Muldoon Creek to Little Wood River Reser	2.47	MILES
ID17040221SK014_03	Muldoon Creek -source to mouth	24.29	MILES
ID17040221SK017_03	Friedman Creek - Trail Creek to mouth	5.93	MILES
ID17040221SK018_02	Trail Creek - source to mouth	16.21	MILES
ID17040221SK019_02	Friedman Creek - source to Trail Creek	11.12	MILES
ID17040221SK020_02	Little Wood River - source to Muldoon Creek.	96.14	MILES
ID17040221SK020_03	Little Wood River - source to Muldoon Creek	7.36	MILES

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ID17040221SK020_04	Little Wood River - source to Muldoon Creek	12.79	MILES
ID17040221SK020_05	Little Wood River - source to Muldoon Creek	1.1	MILES
ID17040221SK021_02	Baugh Creek - source to mouth	49.01	MILES
ID17040221SK021_04	Baugh Creek - source to mouth	3.79	MILES

Appendix E. Category 3—Waters of the State with Insufficient Data and Information to Determine if Any Standards are Attained

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2010 Integrated Report: Category 3: Waters with Insufficient Data to Determine if Any Standards are Attained

2010 Integrated Report: Category 3: Unassessed Waters

Bear River

16010102 Central Bear

ID16010102BR001_02	Intermittent tributaries of Central Bear Subbasin	49.28	MILES
ID16010102BR002_02	Pegram Creek - source to mouth	59.07	MILES
ID16010102BR003_02	Thomas Fork - Idaho/Wyoming border to mouth	30.84	MILES
ID16010102BR003_02L	Upper Gardiner Reservoir (dam)	4.39	ACRES
ID16010102BR004_03	Raymond Creek - Idaho/Wyoming border to mouth; and the H	0.22	MILES
ID16010102BR008_02L	Sheep Creek Reservoir	23.55	ACRES

16010201 Bear Lake

ID16010201BR000_02	Unclassified Waters in CU 16010201	57.01	MILES
ID16010201BR000_03	Unclassified Waters in CU 16010201	0.32	MILES
ID16010201BR000_04	Unclassified Waters in CU 16010201	2	MILES
ID16010201BR001_02	Stream order 1 trib to Alexander Resv.	1.23	MILES
ID16010201BR002_02L	Per Reservoir	40.57	ACRES
ID16010201BR002_03	Bear River -railroad bridge (T14N, R45E, Sec. 21) to Alexand	2.56	MILES
ID16010201BR002_0L	Welling Number Two Dam	11.98	ACRES
ID16010201BR005_02b	upper Pearl Creek	6.28	MILES
ID16010201BR006_02	Stauffer Creek - source to mouth	6.39	MILES
ID16010201BR006_03a	Spring Creek	1.12	MILES
ID16010201BR009_02	Ovid Creek - confluence of North and Mill Creek to mouth	28.14	MILES
ID16010201BR009_02L	Little Valley Reservoir	33.6	ACRES
ID16010201BR010_02	North Creek - source to mouth	18.01	MILES
ID16010201BR011_02	Mill Creek - source to mouth	17.71	MILES
ID16010201BR011_03	Lower Mill Creek	3.87	MILES
ID16010201BR012_05	Bear Lake Outlet - Lifton Station to Bear River	7.79	MILES
ID16010201BR012_05L	Mud Lake	3.12	ACRES
ID16010201BR012_0L	Lifton Station to Bear River	3265.2	ACRES
ID16010201BR013_02	Lower Paris Creek	27.36	MILES
ID16010201BR013_02L	Unnamed Waterbody to Paris Creek	10.44	ACRES
ID16010201BR014_02	Bloomington Creek - source to mouth	32.35	MILES
ID16010201BR014_02aL	Bloomington Lake	10.03	ACRES
ID16010201BR014_02L	Unnamed Waterbody in: Bloomington Creek - Source to Mout	157.18	ACRES
ID16010201BR015_02	Spring Creek - source to mouth	2.54	MILES
ID16010201BR015_03	Spring Creek - St. Charles Cr to Mud Lake	2.69	MILES

ID16010201BR016_02	Little and St. Charles Creeks - source to Bear Lake	7.26	MILES
ID16010201BR017_02	Dry Canyon Creek - source to mouth	16.76	MILES
ID16010201BR018_02	Bear Lake	58.2	MILES
ID16010201BR018_0L	Bear Lake	34438.59	ACRES
ID16010201BR019_02	Fish Haven Creek - source to Bear Lake	3.13	MILES
ID16010201BR019_02b	Fish Haven Creek	2.01	MILES
ID16010201BR022_02	Georgetown Creek - source to mouth	35.75	MILES
ID16010201BR022_03	Georgetown Creek - source to mouth	3.63	MILES
ID16010201BR023_02	Soda Creek - Soda Creek Reservoir Dam to Alexander Reser	13.03	MILES

16010202 Middle Bear

ID16010202BR001_02	Spring Creek - source to Idaho/Utah border	13.46	MILES
ID16010202BR001_03	Spring Creek - source to Idaho/Utah border	3.25	MILES
ID16010202BR002_02	Cub River - US Hwy 91 Bridge (T16S, R40E, Sec. 20) to Idaho	3.23	MILES
ID16010202BR005_03L	Johnson Reservoir (Lamont Reservori)	43.2	ACRES
ID16010202BR005_0L	Lamont Reservoir	84.87	ACRES
ID16010202BR005_0La	Hinkley Reservoir	26.84	ACRES
ID16010202BR006_00L	Nielson Reservoir (dam)	15.91	ACRES
ID16010202BR006_01L	Nash Reservoir (Dam)	16.04	ACRES
ID16010202BR006_02L	Tingey Dam (Reservoir)	20.48	ACRES
ID16010202BR007_02c	Mink Creek	3.58	MILES
ID16010202BR008_02	Oneida Narrows Reservoir	12.11	MILES
ID16010202BR014_02	Cottonwood Creek - source to Oneida Narrows Reservoir	21.48	MILES
ID16010202BR014_02L	Stock Valley Reservoir (dam)	18.67	ACRES
ID16010202BR015_02L	Condie and Casperson Reservoir	105.33	ACRES
ID16010202BR015_03L	Casperson Reservoir (dam)	19.33	ACRES
ID16010202BR015_04L	Strongarm Reservoir #1	151.94	ACRES
ID16010202BR015_0L	Winder Reservoir	75.86	ACRES
ID16010202BR016_01L	Twin Lakes Reservoir	437.28	ACRES
ID16010202BR017_02	Oxford Slough	24.62	MILES
ID16010202BR018_02	Swan Lake Creek Complex	19.13	MILES
ID16010202BR018_02c	Stockton Creek	19.69	MILES
ID16010202BR018_02L	Stockton Creek Reservoir	31.73	ACRES
ID16010202BR018_03	Swan Lake Creek Complex	3.16	MILES
ID16010202BR018_03L	Swan Lake	61.7	ACRES
ID16010202BR020_02e	Weston Creek	5.31	MILES

16010203 Little Bear-Logan

ID16010203BR002_02a	Logan River	8.09	MILES

ID16010203BR002_02b	Hodge Nibley Creek	2.96	MILES

16010204 Lower Bear-Malad

ID16010204BR001_02	Malad River - Little Malad River to Idaho/Utah border	58.92	MILES
ID16010204BR002_03L	Saint Johns Reservoir	10.01	ACRES
ID16010204BR003_02L	Devil Creek Reservoir	85.1	ACRES
ID16010204BR005_02	Deep Creek - Deep Creek Reservoir Dam to mouth	15.73	MILES
ID16010204BR006L_0L	Deep Creek Reservoir	63.51	ACRES
ID16010204BR007_02L	Upper Deep Creek Reservoir	25.69	ACRES
ID16010204BR008_04L	Billy Snipe Reservoir	4.3	ACRES
ID16010204BR009L_0L	Daniels Reservoir	361.49	ACRES
ID16010204BR010_02	Wright Creek - source to Daniels Reservoir	32.21	MILES
ID16010204BR013_02	Samaria Creek - source to mouth	29.73	MILES
ID16010204BR013_03	Samaria Creek - source to mouth	4.58	MILES

16020309 Curlew Valley

ID16020309BR001_02	Deep Creek - Rock Creek to Idaho/Utah border	376.94	MILES
ID16020309BR001_02L	Sweeten Reservoir	18.32	ACRES
ID16020309BR001_03L	Stone Reservoir	123.92	ACRES
ID16020309BR002_02	Deep Creek - source to Rock Creek	86.1	MILES
ID16020309BR002_03	Deep Creek - source to Rock Creek	18.36	MILES
ID16020309BR003_02	Rock Creek - source to mouth	60.96	MILES
ID16020309BR003_03	Rock Creek - source to mouth	6.51	MILES

Clearwater

17060108 Palouse

ID17060108CL002_02	South Fork Palouse River - Gnat Cr to ID/WA border; tribs	21.98	MILES
ID17060108CL004a_02	Gnat Creek - source to T40N, R05W, Sec. 26	5.82	MILES
ID17060108CL004b_02	Gnat Creek - T40N, R05W, Sec. 26 to mouth	1.87	MILES
ID17060108CL006a_02	Missouri Flat Creek - source to T40N, R5W, Sec. 17	1.26	MILES
ID17060108CL006b_02	Missouri Flat Creek - T40N, R5W, Sec. 17 to ID/WA border	5.81	MILES
ID17060108CL007a_02	Fourmile Creek - source to T40N, R5W, Sec. 5	2.64	MILES
ID17060108CL007b_02	Fourmile Creek - T40N, R5W, Sec. 5 to ID/WA border	11.45	MILES
ID17060108CL008a_02	Silver Creek - source to T43, R5W, Sec. 29	0.81	MILES
ID17060108CL008b_02	Silver Creek - T43, R5W, Sec. 29 to Idaho/Washington border	5.57	MILES
ID17060108CL009_02	Palouse River - Deep Creek to ID/WA border; tribs	29.6	MILES
ID17060108CL009_04	Palouse River - Deep Creek to Idaho/Washington border	9.14	MILES
ID17060108CL010_04	Palouse River - Hatter Creek to Deep Creek	6.17	MILES

ID17060108CL016_02	Palouse River - Strychnine Creek to Hatter Creek	43.78	MILES
ID17060108CL017_03	Flat Creek - source to mouth	0.2	MILES
ID17060108CL018_03	Palouse River - source to Strychnine Creek	4.52	MILES
ID17060108CL023_02	Meadow Creek - East Fork Meadow Creek to mouth	1.08	MILES
ID17060108CL033a_02	Cedar Creek - source to T43N, R05W, Sec. 28	0.22	MILES
ID17060108CL033b_02	Cedar Creek - T43N, R05W, Sec. 28 to Idaho/Washington bor	11.41	MILES

17060109 Rock

ID17060109CL001_02	South Fork Pine Creek - source to Idaho/Washington border	7.81	MILES
ID17060109CL002_02	North Fork Pine Creek - source to Idaho/Washington border	7.39	MILES
ID17060109CL003_02	Unnamed Tributaries - source to Idaho/Washington border (T4	5.54	MILES

17060301 Upper Selway

ID17060301CL022_01L	Gold Pan Lake	11.01	ACRES
ID17060301CL022_02L	Thirteen Lakes	12.84	ACRES
ID17060301CL023_02L	Elk Track Lakes - Three Lakes Creek	11.65	ACRES
ID17060301CL024_02L	Swet Lake	11.23	ACRES
ID17060301CL030_02	Storm Creek - source to mouth	18.19	MILES
ID17060301CL040_02L	Unamed Lake - Canyon Creek	9.36	ACRES
ID17060301CL042_0L	Unnamed Lakes in 17060301CL4202	15.67	ACRES
ID17060301CL051_02L	Spruce Lake	10.41	ACRES
ID17060301CL053_02L	Diamon Lake	10.26	ACRES
ID17060301CL055_02L	Park Lakes	22.86	ACRES
ID17060301CL056_02L	Sid and Papoose Lakes	7.59	ACRES

17060302 Lower Selway

ID17060302CL001_06	Selway River - O'Hara Creek to mouth	6.92	MILES
ID17060302CL004_02	West Fork O'Hara Creek - source to mouth	11.13	MILES
ID17060302CL005_02	East Fork O'Hara Creek - source to mouth	6.55	MILES
ID17060302CL006_06	Selway River - Meadow Creek to O'Hara Creek	12.29	MILES
ID17060302CL007_02	Falls Creek - source to mouth	9.59	MILES
ID17060302CL008_02	Meadow Creek - Buck Lake Creek to mouth	29.66	MILES
ID17060302CL008_03	Meadow Creek - Buck Lake Creek to mouth	0.37	MILES
ID17060302CL009_02	Horse Creek - source to mouth	17.48	MILES
ID17060302CL010_02	Fivemile Creek - source to mouth	17.47	MILES
ID17060302CL011_02	Little Boulder Creek - source to mouth	9.83	MILES
ID17060302CL012_02	Meadow Creek - East Fork Meadow Creek to Buck Lake Cree	30.73	MILES
ID17060302CL014_02	Sable Creek - source to mouth	15.22	MILES
ID17060302CL016_02	Meadow Creek - source to East Fork Meadow Creek	41.23	MILES
ID17060302CL016_03	Meadow Creek - source to East Fork Meadow Creek	12.18	MILES

ID17060302CL016_04	Meadow Creek - source to East Fork Meadow Creek	5.15	MILES
ID17060302CL017_02	Butter Creek - source to mouth	5.86	MILES
ID17060302CL018_02	Three Prong Creek - source to mouth	14.51	MILES
ID17060302CL018_03	Three Prong Creek - source to mouth	2.89	MILES
ID17060302CL019_03	East Fork Meadow Creek - source to mouth	1.63	MILES
ID17060302CL022_06	Selway River - Moose Creek to Meadow Creek	21.15	MILES
ID17060302CL032_02L	Battle Lake	35.45	ACRES
ID17060302CL033_01L	Dead Elk Creek Lake	10.69	ACRES
ID17060302CL033_03L	Moose Lake	9.51	ACRES
ID17060302CL033_0L	Jeanette Lake	6.58	ACRES
ID17060302CL037_02L	Maple Lake	4.05	ACRES
ID17060302CL038_02L	May Lake	11.78	ACRES
ID17060302CL046_01L	North and South Lone Lakes	26.36	ACRES
ID17060302CL046_0L	Shasta Lake	5.25	ACRES
ID17060302CL047_02L	Lizard Lakes	48.79	ACRES
ID17060302CL049_02L	North and South Three Links Lakes	31.41	ACRES
ID17060302CL050_02	Gedney Creek - West Fork Gedney Creek to mouth	4.26	MILES
ID17060302CL051_02	Gedney Creek - source to West Fork Gedney Creek	18.94	MILES
ID17060302CL051_03	Gedney Creek - source to West Fork Gedney Creek	1.5	MILES
ID17060302CL052_01L	Cove-Rainbow Lakes	9.74	ACRES
ID17060302CL052_02	West Fork Gedney Creek - source to mouth	28.65	MILES
ID17060302CL052_03	West Fork Gedney Creek - source to mouth	4.13	MILES

17060303 Lochsa

ID17060303CL002_02	Kerr Creek - source to mouth	7.33	MILES
ID17060303CL003_02	Lochsa River - Old Man Creek to Deadman Creek	10.84	MILES
ID17060303CL004_02	Coolwater Creek - source to mouth	11.08	MILES
ID17060303CL005_02	Fire Creek - source to mouth	21.85	MILES
ID17060303CL006_02	Split Creek - source to mouth	16.34	MILES
ID17060303CL007_03	Old Man Creek - source to mouth	9.55	MILES
ID17060303CL007_0L	Chimney Lake	4.93	ACRES
ID17060303CL008_02	Lochsa River - Fish Creek to Old Man Creek	23.58	MILES
ID17060303CL011_02L	Long Lake	28.25	ACRES
ID17060303CL014_02	Sponge Creek - Fish Lake Creek to mouth	3.4	MILES
ID17060303CL014_03	Sponge Creek - Fish Lake Creek to mouth	5.37	MILES
ID17060303CL017_02	Warm Springs Creek - Wind Lakes Creek to mouth	28.93	MILES
ID17060303CL018_02L	Hungry Lake	23.66	ACRES
ID17060303CL020_02a	Un-named Tributaries	4.45	MILES
ID17060303CL021_02	Jay Creek - source to mouth	5.89	MILES

ID17060303CL022_02	Cliff Creek - source to mouth	6.22	MILES
ID17060303CL023_02L	Walton Lakes	22.21	ACRES
ID17060303CL024_02	White Sand Creek - Storm Creek to mouth	13.91	MILES
ID17060303CL024_04	White Sand Creek - Storm Creek to mouth	9.91	MILES
ID17060303CL025_02	White Sand Creek - source to Storm Creek	33.69	MILES
ID17060303CL025_02L	Parachute Lake	29.99	ACRES
ID17060303CL025_03	White Sand Creek - source to Storm Creek	2.1	MILES
ID17060303CL025_04	White Sand Creek - source to Storm Creek	4.26	MILES
ID17060303CL025_0L	Garnet Lake	7.73	ACRES
ID17060303CL026_02L	Colt Creek Lakes	26.94	ACRES
ID17060303CL026_03	Colt Creek - source to mouth	4.47	MILES
ID17060303CL027_02L	Hoodoo Lake	8.22	ACRES
ID17060303CL029_02L	Big Sand Lake	69.72	ACRES
ID17060303CL030_01L	Tadpole Lake	12.27	ACRES
ID17060303CL032_01L	Storm Lake	13.38	ACRES
ID17060303CL032_02L	Maud Lake	24.11	ACRES
ID17060303CL032_03L	Dan and Dodge Lakes	17.65	ACRES
ID17060303CL033_02	Beaver Creek - source to mouth	13.07	MILES
ID17060303CL033_03	Beaver Creek - source to mouth	0.62	MILES
ID17060303CL034_02	Crooked Fork - Brushy Fork to mouth	13.98	MILES
ID17060303CL034_05	Crooked Fork - Brushy Fork to mouth	6.89	MILES
ID17060303CL035_04	Brushy Fork - Spruce Creek to mouth	4.67	MILES
ID17060303CL037_02	Brushy Fork - source to Spruce Creek	12.5	MILES
ID17060303CL038_04	Crooked Fork - source to Brushy Fork	6.6	MILES
ID17060303CL045_02	Squaw Creek - source to mouth	6.95	MILES
ID17060303CL046_02	West Fork Squaw Creek - source to mouth	6.41	MILES
ID17060303CL048_02L	Indian Postoffice Lake	4.6	ACRES
ID17060303CL049_02	Weir Creek - source to mouth	15.12	MILES
ID17060303CL053_02	Willow Creek - source to mouth	14.55	MILES
ID17060303CL053_03	Willow Creek - source to mouth	1.03	MILES
ID17060303CL054_02	Hungery Creek - Obia Creek to mouth	17.78	MILES
ID17060303CL054_03	Hungery Creek - Obia Creek to mouth	7.78	MILES
ID17060303CL059_02	Deadman Creek - East Fork Deadman Creek to mouth	0.98	MILES
ID17060303CL060_02	East Fork Deadman Creek - source to mouth	17.03	MILES
ID17060303CL060_03	East Fork Deadman Creek - source to mouth	0.64	MILES

17060304 Middle Fork Clearwater

ID17060304CL001_03	Middle Fork Clearwater River - confluence of Lochsa	0.96	MILES
ID17060304CL001_05	Middle Fork Clearwater River - confluence of Lochsa	22.93	MILES

ID17060304CL002_02	Clear Creek - South Fork Clear Creek to mouth	36.65	MILES
ID17060304CL003_02	West Fork Clear Creek - source to mouth	13.56	MILES
ID17060304CL004_02	South Fork Clear Creek - source to mouth	25.75	MILES
ID17060304CL004_03	South Fork Clear Creek - source to mouth	6.86	MILES
ID17060304CL005_02	Kay Creek - source to mouth	8.6	MILES
ID17060304CL006_03	Clear Creek - source to South Fork Clear Creek	3.37	MILES
ID17060304CL007_03	Middle Fork Clear Creek - source to mouth	1.84	MILES
ID17060304CL011_03	Maggie Creek - source to mouth	6.3	MILES

17060306 Clearwater

ID17060306CL001_02	Lower Granite Dam pool	20.81	MILES
ID17060306CL001_03	Lower Granite Dam pool	0.08	MILES
ID17060306CL002_02	Clearwater River - Potlatch River to Lower Granite Dam pool	39.44	MILES
ID17060306CL003_02a	Mann's Reservoir	0.44	MILES
ID17060306CL004_02	Lapwai Creek - Sweetwater Creek to mouth	28.59	MILES
ID17060306CL005_02	Sweetwater Creek - Webb Creek to mouth	7.93	MILES
ID17060306CL008_02	Lapwai Creek - Winchester Lake to Sweetwater Creek	50.59	MILES
ID17060306CL011_02	Mission Creek - source to mouth	75.5	MILES
ID17060306CL012_02	Tom Beall Creek - source to mouth	20.24	MILES
ID17060306CL012_03	Tom Beall Creek - source to mouth	1.14	MILES
ID17060306CL013_02	Clearwater River - North Fork Clearwater River to mouth	56.05	MILES
ID17060306CL013_03	Clearwater River - North Fork Clearwater River to mouth	0.06	MILES
ID17060306CL014_02	Cottonwood Creek - source to mouth	51.87	MILES
ID17060306CL017_02	Cold Springs Creek - source to mouth	23.27	MILES
ID17060306CL017_03	Cold Springs Creek - source to mouth	2.23	MILES
ID17060306CL018_02	Little Canyon Creek - confluence of Holes and Long Hollow Cr	33.07	MILES
ID17060306CL021_02	Clearwater River - Lolo Creek to North Fork Clearwater River	35.54	MILES
ID17060306CL021_06	Clearwater River - Lolo Creek to North Fork Clearwater River	13.1	MILES
ID17060306CL022_06	Clearwater River - confluence of South and Middle Fork Clear	19.3	MILES
ID17060306CL026_03	Lolo Creek - Yakus Creek to mouth	2.59	MILES
ID17060306CL033_02	Big Creek - source to mouth	12.49	MILES
ID17060306CL034_02	Jim Ford Creek - Jim Ford Creek waterfall (12.5 miles upstre	13.24	MILES
ID17060306CL037_02	Winter Creek - Winter Creek waterfall (3.4 miles upstream) t	6.63	MILES
ID17060306CL039_04	Orofino Creek - source to mouth	29.88	MILES
ID17060306CL040_02	Whiskey Creek - source to mouth	18.48	MILES
ID17060306CL042_02	Louse Creek - source to mouth	19.58	MILES
ID17060306CL044_02	Potlatch River - Big Bear Creek to mouth	13.73	MILES
ID17060306CL045_02	Potlatch River - Corral Creek to Big Bear Creek	30.51	MILES
ID17060306CL046_03	Cedar Creek - source to mouth	2.67	MILES

ID17060306CL048_02	Potlatch River - Moose Creek to Corral Creek	15.64	MILES
ID17060306CL050_02	Little Boulder Creek - source to mouth	6.63	MILES
ID17060306CL056_02	Big Bear Creek - confluence of West and East Fork Big Bear	25.39	MILES
ID17060306CL057_03	East Fork Big Bear Creek - source to mouth	3.48	MILES
ID17060306CL057_04	East Fork Big Bear Creek - source to mouth	0.34	MILES
ID17060306CL058_02	West Fork Big Bear Creek - source to mouth	15.44	MILES
ID17060306CL059_02	Dry Creek - source to mouth	16.51	MILES
ID17060306CL059_03	Dry Creek - source to mouth	2.75	MILES
ID17060306CL060_02	Little Bear Creek - source to mouth	37.47	MILES
ID17060306CL063_02	Bethel Canyon - source to mouth	16.32	MILES
ID17060306CL064_02	Little Potlatch Creek - source to mouth	62.34	MILES
ID17060306CL065_02	Howard Gulch - source to mouth	12.13	MILES

17060307 Upper North Fork Clearwater

ID17060307CL001_02	North Fork Clearwater River - Skull Creek to Aquarius Campgr	13.75	MILES
ID17060307CL001_05	North Fork Clearwater River - Skull Creek to Aquarius Camp g	6.88	MILES
ID17060307CL002_05	North Fork Clearwater River- Washington Creek to Skull Cree	12.82	MILES
ID17060307CL004_05	North Fork Clearwater River - Orogrande Creek to Washington	6.74	MILES
ID17060307CL007_02	French Creek - source to Sylvan Creek	12.74	MILES
ID17060307CL008_02	North Fork Clearwater River - Weitas Creek to Orogrande Cr.	17.14	MILES
ID17060307CL008_05	North Fork Clearwater River - Weitas Creek to Orogrande Cre	4.24	MILES
ID17060307CL009_02	Weitas Creek - Hemlock Creek to mouth	29.85	MILES
ID17060307CL009_03	Weitas Creek - Hemlock Creek to mouth	2.04	MILES
ID17060307CL009_04	Weitas Creek - Hemlock Creek to mouth	6.59	MILES
ID17060307CL011_02	Weitas Creek - Windy Creek to Hemlock Creek	38.31	MILES
ID17060307CL013_02	Little Weitas Creek - source to mouth	32.36	MILES
ID17060307CL013_03	Little Weitas Creek - source to mouth	5.44	MILES
ID17060307CL014_02	Weitas Creek - source to Windy Creek	46.14	MILES
ID17060307CL014_03	Weitas Creek - source to Windy Creek	3.01	MILES
ID17060307CL014_04	Weitas Creek - source to Windy Creek	5.16	MILES
ID17060307CL015_02	Windy Creek - source to mouth	17.63	MILES
ID17060307CL016_02	North Fork Clearwater River - Kelly Creek to Weitas Creek	28.55	MILES
ID17060307CL016_05	North Fork Clearwater River - Kelly Creek to Weitas Creek	14.1	MILES
ID17060307CL017_02	Fourth of July Creek - source to mouth	42.05	MILES
ID17060307CL017_03	Fourth of July Creek - source to mouth	9.96	MILES
ID17060307CL018_02	Kelly Creek - Cayuse Creek to mouth	36.15	MILES
ID17060307CL018_03	Kelly Creek - Cayuse Creek to mouth	1.05	MILES
ID17060307CL018_05	Kelly Creek - Cayuse Creek to mouth	16.49	MILES
ID17060307CL019_02	Cayuse Creek - Gravey Creek to mouth	22.66	MILES

ID17060307CL019_04	Cayuse Creek - Gravey Creek to mouth	16.44	MILES
ID17060307CL022_02	Cayuse Creek - source to Gravey Creek	57.83	MILES
ID17060307CL022_03	Cayuse Creek - source to Gravey Creek	15.31	MILES
ID17060307CL023_02	Toboggan Creek - source to mouth	26.96	MILES
ID17060307CL028_02	Moose Creek - Osier Creek to mouth	3.05	MILES
ID17060307CL028_03	Moose Creek - Osier Creek to mouth	2.22	MILES
ID17060307CL028_04	Moose Creek - Osier Creek to mouth	0.05	MILES
ID17060307CL032_02	North Fork Clearwater River - Lake Creek to Kelly Creek	8.2	MILES
ID17060307CL032_04	North Fork Clearwater River - Lake Creek to Kelly Creek	18.63	MILES
ID17060307CL033_02	Lake Creek - source to mouth	31.35	MILES
ID17060307CL034_02	North Fork Clearwater River - Vanderbilt Gulch to Lake Creek	8.44	MILES
ID17060307CL034_03	North Fork Clearwater River - Vanderbilt Gulch to Lake Creek	5.04	MILES
ID17060307CL036_02	North Fork Clearwater River - source to Vanderbilt Gulch	28.59	MILES
ID17060307CL037_02	Vanderbilt Gulch - source to mouth	14.45	MILES
ID17060307CL038_02	Meadow Creek - source to mouth	30.28	MILES
ID17060307CL041_02	Sprague Creek - source to mouth	1.92	MILES
ID17060307CL044_02	Quartz Creek - source to mouth	5.7	MILES
ID17060307CL046_02	Skull Creek - Collins Creek to mouth	5.66	MILES

17060308 Lower North Fork Clearwater

ID17060308CL002_02	Dworshak Reservoir tributaries	259.72	MILES
ID17060308CL002_03	Dworshak Reservoir 3rd Order Tribs.	11.01	MILES
ID17060308CL002_05	Dworshak Reservoir	24.68	MILES
ID17060308CL002_06L	Dworshak Reservoir	16508.87	ACRES
ID17060308CL006_02	Silver Creek - source to Dworshak Reservoir	31.53	MILES
ID17060308CL006_03	Silver Creek - source to Dworshak Reservoir	3.65	MILES
ID17060308CL007_02	Benton Creek - source to Dworshak Reservoir	16.61	MILES
ID17060308CL008_02	Marquette Creek - source to mouth	1.92	MILES
ID17060308CL008_04	North Fork Clearwater River - Aquaruis Campgrd to Dworshak	0.2	MILES
ID17060308CL008_05	North Fork Clearwater River - Aquaruis Cmpgrd to Dworshak	2.9	MILES
ID17060308CL011_02	Little North Fork Clearwater River - Foehl Cr to Dworshak R	47.25	MILES
ID17060308CL011_03	Little North Fork Clearwater River - Foehl Cr to Dworshak R	1.53	MILES
ID17060308CL011_05	Little North Fork Clearwater River - Foehl Cr to Dworshak R.	13.62	MILES
ID17060308CL012_02	Little North Fork Clearwater R.- Spotted Louis .to Foehl C.	10.3	MILES
ID17060308CL012_02L	Larkins Lakes	7.74	ACRES
ID17060308CL012_04	Little North Fork Clearwater R.- Spotted Louis C.to Foehl C.	4.33	MILES
ID17060308CL013_02L	Sawtooth Creek Lakes	35.51	ACRES
ID17060308CL014_02	Canyon Creek - source to mouth	42.42	MILES
ID17060308CL014_03	Canyon Creek - source to mouth	3.31	MILES

ID17060308CL014_04	Canyon Creek - source to mouth	6.65	MILES
ID17060308CL015_02	Spotted Louis Creek - source to mouth	11.71	MILES
ID17060308CL016_02	Little North Fork Clearwater R.- Rutledge C.to Spotted Louis	25.43	MILES
ID17060308CL016_02L	Steamboat Lake	7.91	ACRES
ID17060308CL016_04	Little North Fork Clearwater R.-Rutledge C. to Spotted Louis	5.74	MILES
ID17060308CL018_01L	Fish Lake	5.89	ACRES
ID17060308CL018_02	Little North Fork Clearwater R.- source to Rutledge Creek	50.56	MILES
ID17060308CL018_02L	Lost Lake	27.02	ACRES
ID17060308CL018_04	Little North Fork Clearwater River - source to Rutledge Cr.	2.78	MILES
ID17060308CL019_02	Foehl Creek - source to mouth	28.42	MILES
ID17060308CL019_03	Foehl Creek - source to mouth	4.03	MILES
ID17060308CL022_02	Glover Creek - source to mouth	27.96	MILES
ID17060308CL026_02	Gold Creek - source to Dworshak Reservoir	22.48	MILES
ID17060308CL026_03	Gold Creek - source to Dworshak Reservoir	5.05	MILES
ID17060308CL027_02	Weitas Creek - source to Dworshak Reservoir	9.77	MILES
ID17060308CL031_02	Bull Run Creek - conf. of Squaw and Shattuck Crs to mouth	7.44	MILES
ID17060308CL031_03	Bull Run Creek - conf. of Squaw and Shattuck Crs to mouth	4.99	MILES
ID17060308CL032_02	Shattuck Creek - source to mouth	8.08	MILES
ID17060308CL033_02	Squaw Creek - source to mouth	18.29	MILES
ID17060308CL033_03	Squaw Creek - source to mouth	0.75	MILES
ID17060308CL035_02	Dicks Creek - source to Dworshak Reservoir	16.86	MILES
ID17060308CL035_03	Dicks Creek - source to Dworshak Reservoir	0.65	MILES

Panhandle

17010101 Upper Kootenai

ID17010101PN003_02	South Callahan Creek - Glad Creek to Idaho/Montana border	3.13	MILES

17010104 Lower Kootenai

ID17010104PN001_01L	Unnamed Waterbody near Watson Spur	59.48	ACRES
ID17010104PN002_02L	Saddle Lake	1.68	ACRES
ID17010104PN003_02L	Marsh Lake	4.07	ACRES
ID17010104PN006_02L	Joe and Hidden Lakes	44.29	ACRES
ID17010104PN008_02L	Smith Lake	4.33	ACRES
ID17010104PN011_01L	Ball Lakes- Spanish Creek	8.44	ACRES
ID17010104PN011_02L	Myrtle Lake	19.74	ACRES
ID17010104PN013_02L	Myrtle Creek Lakes	8.52	ACRES
ID17010104PN015_02	Deep Creek - Snow Creek to mouth	1.57	MILES
ID17010104PN016_01L	Snow and Corner Lakes	10.37	ACRES

2010 Integrated Report: Category 3: Unassessed Waters

ID17010104PN016_02L	Bottleneck Lake	10.62	ACRES
ID17010104PN017_02L	Roman Nose Lakes	33.56	ACRES
ID17010104PN018_02	Deep Creek - Brown Creek to Snow Creek	6.1	MILES
ID17010104PN020_02a	Gold Creek	2.51	MILES
ID17010104PN022_02	Tributaries to Deep Creek - below McArthur Lake	5.05	MILES
ID17010104PN023_02	White Creek	1	MILES
ID17010104PN024_04	Dodge Creek - headwaters to Dodge Cr	8.25	MILES
ID17010104PN026_03a	Trail Creek - Highway to mouth	0.87	MILES
ID17010104PN027_02	Brown Creek - upper, headwaters to Brown Cr	14.19	MILES
ID17010104PN029_02	Kootenai River Tributaries - Moyie River to Deep Creek	16.98	MILES
ID17010104PN029_02a	Dobson Creek	15.64	MILES
ID17010104PN029_02L	Dawson Lake	29.75	ACRES
ID17010104PN031_01L	Bonner Lake	21.45	ACRES
ID17010104PN031_02	Kootenai River - tributaries, Idaho/Montana to Moyie River	43.22	MILES
ID17010104PN031_02L	Herman Lake	30.63	ACRES
ID17010104PN035_02	Curley Creek - upper from Perkins Lake and unnamed tribs	10.13	MILES
ID17010104PN035_02L	Perkins Lake (Curley Creek)	53.11	ACRES
ID17010104PN036_02	Fleming Creek - upper	27.65	MILES
ID17010104PN037_02	Rock Creek - upper	20.9	MILES
ID17010104PN038_02	Mission Creek - Brush Creek to mouth	3.76	MILES

17010105 Moyie

ID17010105PN002_05	Moyie River - Meadow Creek to Moyie Falls Dam	7.88	MILES
ID17010105PN005_05	Moyie River - Round Prairie Creek to Meadow Creek	10.38	MILES
ID17010105PN006_02L	Spruce Lake	6.09	ACRES
ID17010105PN006_05	Moyie River - Idaho/Canadian border to Round Prairie Creek	7.24	MILES
ID17010105PN008_02	Round Prairie Creek - Gillon Creek to mouth	3.23	MILES
ID17010105PN008_03	Round Prairie Creek - Gillon Creek to mouth	3.67	MILES
ID17010105PN009_02L	Robinson Lake (Gillon Creek)	53.75	ACRES

17010213 Lower Clark Fork

ID17010213PN001_02	Clark Fork River Delta - Mosquito Creek to Pend Oreille Lake	8.26	MILES
ID17010213PN001_03	Clark Fork River Delta - Mosquito Creek to Pend Oreille Lake	1.19	MILES
ID17010213PN001_04	Clark Fork River Delta - Mosquito Creek to Pend Oreille Lake	1.51	MILES
ID17010213PN006_02	West Fork Elk Creek - source to Idaho/Montana border	3.86	MILES
ID17010213PN007_02	West Fork Blue Creek - source to Idaho/Montana border	4.68	MILES
ID17010213PN008_02	Gold Creek - source to Idaho/Montana border	7.49	MILES
ID17010213PN016_02L	Porcupine Lake	10.48	ACRES
ID17010213PN019_02L	Darling-Gem Lakes	16.35	ACRES

ID17010213PN021_02a	Cougar Creek	3.2	MILES

17010214 Pend Oreille Lake

ID17010214PN001_02	Pend Oreille River - tribs, Priest River to Albeni Falls Dam	10.28	MILES
ID17010214PN002_02	Small tribs to PDO River between Long Bridge and Priest R	27.55	MILES
ID17010214PN002_02L	Morton Slough	124.22	ACRES
ID17010214PN002_03	Lower Hornby Creek	4.35	MILES
ID17010214PN003_02L	Hoodoo Lake	92.62	ACRES
ID17010214PN003_03	Hoodoo Creek - source to mouth	3.53	MILES
ID17010214PN004_02	Kelso Lake outlet Creek	7.96	MILES
ID17010214PN004_02L	Kelso - Round Lakes	60.56	ACRES
ID17010214PN005_02	Granite Lake Tributaries	3.51	MILES
ID17010214PN005L_0L	Granite Lake	17.3	ACRES
ID17010214PN006_01L	Beaver Lake	17.26	ACRES
ID17010214PN006_02	Beaver Lake - Stream Order 1 & 2 Tribs	9.78	MILES
ID17010214PN006_02L	Lambertson Lake	21.47	ACRES
ID17010214PN007_02	Spirit Creek - source to mouth	6.59	MILES
ID17010214PN007_03	Spirit Creek - source to mouth	4.76	MILES
ID17010214PN008_02	Blanchard Lake Stream Order 01 & 02 Tribs	43.86	MILES
ID17010214PN008_02L	Blanchard Lake	134.69	ACRES
ID17010214PN008_03L	Lake San Souci	30.19	ACRES
ID17010214PN008_04	Blanchard Lake	4.7	MILES
ID17010214PN008_04L	Blanchard Creek Diversion	27.68	ACRES
ID17010214PN009_02	01 & 02 Tribs to Spirit Lake	3.88	MILES
ID17010214PN011_02	Jewell Lake	8.63	MILES
ID17010214PN011_02L	Jewel Lake	32.38	ACRES
ID17010214PN011_03	Jewell Lake	1.83	MILES
ID17010214PN012_04L	Round Lake	43.04	ACRES
ID17010214PN013_02	01 & 02 tribs to Cocolalla Lake	18.2	MILES
ID17010214PN013_02L	Unnamed Lake Westmond Creek	7.78	ACRES
ID17010214PN016_02	Fry Creek - source to mouth	11.25	MILES
ID17010214PN018_02	West side first and second order tribs. to Pend Oreille Lake	28.86	MILES
ID17010214PN019_02L	Gamble Lake	102.62	ACRES
ID17010214PN020_0L	Mirror Lake	84.02	ACRES
ID17010214PN028_02	Riser Creek - source to mouth	3.23	MILES
ID17010214PN037_02L	Beaver Lake	4.16	ACRES
ID17010214PN040_0L	Walsh Lake	37.07	ACRES
ID17010214PN041_01L	Beehive Lakes	16.29	ACRES
ID17010214PN041_02L	Harrison Lake	28.85	ACRES

ID17010214PN045_02L	Caribou Lake	5.88	ACRES
ID17010214PN055_02	Carr Creek - tributaries	6.05	MILES
ID17010214PN056_02	Unnamed Tributary to Carr Creek	5.68	MILES
ID17010214PN061_02	Unnamed tributary to Pend Oreille River	2.43	MILES

17010215 Priest

ID17010215PN001_02	Lower Priest River - Upper West Branch Priest River to mouth	83.76	MILES
ID17010215PN001_02L	Mirror Lake	6.45	ACRES
ID17010215PN001_03	Lower Priest River - Upper West Branch Priest River to mouth	3.91	MILES
ID17010215PN001_03L	Blue Lake	66.84	ACRES
ID17010215PN002_02	Big Creek - source to mouth	16.65	MILES
ID17010215PN004_02L	Unnamed Lake - Lost Creek	4.06	ACRES
ID17010215PN005_02	Lower Priest River - Priest Lake to Upper West Branch Priest	2.78	MILES
ID17010215PN005_05	Lower Priest River - Priest Lake to Upper West Branch Priest	8.79	MILES
ID17010215PN006L_0L	Priest Lake	23334.07	ACRES
ID17010215PN007_02	Chase Lake	1.58	MILES
ID17010215PN007L_0L	Chase Lake	174.21	ACRES
ID17010215PN009_02L	Hunt Lake	13.89	ACRES
ID17010215PN012_01L	Two Mouth Lakes	11.75	ACRES
ID17010215PN012_02L	Standard Lakes	12.88	ACRES
ID17010215PN013_02L	Kent Lake	13.95	ACRES
ID17010215PN014_04	Priest Lake Thorofare - Upper Priest Lake to Priest Lake	2.75	MILES
ID17010215PN015_02L	Caribou Lakes	12.89	ACRES
ID17010215PN016L_0L	Upper Priest Lake	1339.31	ACRES
ID17010215PN018_04	Upper Priest River - Idaho/Canadian border to mouth	1.37	MILES
ID17010215PN020_02	Beaver Creek - source to mouth	12.68	MILES
ID17010215PN024_02	Kalispell Creek - Idaho/Washington border to mouth	32.73	MILES
ID17010215PN027_02	Upper West Branch Priest River - Idaho/Washington border to	44.83	MILES
ID17010215PN028_02	Goose Creek - Idaho/Washington border to mouth	32.42	MILES
ID17010215PN029_02	Quartz Creek - source to mouth	14.64	MILES
ID17010215PN030_02	Lower West Branch Priest River - Idaho/Washington border to	95.21	MILES
ID17010215PN031_02	Moores Creek - source to mouth	25.01	MILES
ID17010215PN031_03	Moores Creek - source to mouth	3.86	MILES

17010216 Pend Oreille

ID17010216PN001_02	South Salmo River - headwaters to Idaho/Washington border	4.44	MILES
ID17010216PN002_02	Pend Oreille River tributaries, below Albeni Falls Dam	11.78	MILES
ID17010216PN002_02L	Freeman Lake - Freeman Creek	52.87	ACRES

17010301 Upper Coeur d Alene

ID17010301PN001_02a	NF Coeur d'Alene R tributaries btw Yellowdog and Prichard Cr	17.9	MILES
ID17010301PN002_02	Graham Creek, headwaters and tributaries	13.11	MILES
ID17010301PN010_02	Shoshone Creek tributaries, below Falls Creek	7.5	MILES
ID17010301PN013_02a	NF Coeur d'Alene R tributaries btw Jordan Cr and Tepee Cr	7.46	MILES
ID17010301PN017_02	Tepee Creek tributaries below Trail Cr.	20.71	MILES
ID17010301PN018_03	Independence Creek, btw Ellis Cr. and Declaration Cr.	0.78	MILES
ID17010301PN023_02	Flat Creek headwaters and tributaries	12.52	MILES
ID17010301PN027_03	Grizzly Creek between Dewey Cr and NFCDA River	1.12	MILES
ID17010301PN029_02	Cougar Gulch headwaters and tributaries	18.57	MILES
ID17010301PN030_02b	Hudlow Creek and tributaries	8.68	MILES

17010302 South Fork Coeur d Alene

ID17010302PN002_02	Pine Creek - East Fork Pine Creek to mouth	5.71	MILES
ID17010302PN007a_01L	Elsie Lake	14.3	ACRES
ID17010302PN007b_03	Big Creek - mining impact area to mouth	2.54	MILES
ID17010302PN008a_02	Shields Gulch - source to mining impact area	1.55	MILES
ID17010302PN008b_02	Shields Gulch - mining impact area to mouth	0.39	MILES
ID17010302PN009a_02L	Lost Lake	4.45	ACRES
ID17010302PN011_02	South Fork Coeur d'Alene River - from and including Daisy Gu	33.1	MILES
ID17010302PN011_02L	Unnamed Lake Gold Creek	3.69	ACRES
ID17010302PN012_02	Willow Creek - source to mouth	4.5	MILES
ID17010302PN012_02L	Upper Stevens/Lone Lakes	39.09	ACRES
ID17010302PN015_02L	Upper Golden Lake	16.3	ACRES
ID17010302PN020_03	Bear Creek - source to mouth	2.12	MILES

17010303 Coeur d Alene Lake

ID17010303PN001_02a	French Gulch	1.64	MILES
ID17010303PN001_02b	Unnamed Tributary to Bennett Bay	2.01	MILES
ID17010303PN001_02c	Blue Creek	8.49	MILES
ID17010303PN001_02d	Neachen Creek, Unnamed Creek into Echo & Gotham Bay	6.67	MILES
ID17010303PN001_02e	Unnamed Tribs to Powderhorn & Bell Bay	4.78	MILES
ID17010303PN001_02f	Delcaro Ck, Lyle Ck, Scott Ck, & Stinson Ck.	10.02	MILES
ID17010303PN006_02	Lake Creek - Idaho/Washington border to mouth	25.85	MILES
ID17010303PN007_02	Coeur d'Alene River - Latour Creek to mouth	4.52	MILES
ID17010303PN008_02	01 & 02 tribs to Anderson Lake	4.38	MILES
ID17010303PN008L_0L	Anderson Lake	541.1586	ACRES
ID17010303PN009_02	Black Lake - Stream order 1 & 2	23.34	MILES
ID17010303PN009_03	Black Lake - Stream Order 03	1.01	MILES
ID17010303PN010_02	Medicine Lake - Stream order 1 & 2	9.52	MILES

ID17010303PN010_03	Evans Creek	0.53	MILES
ID17010303PN010L_0L	Cave & Medicine Lakes	988.42	ACRES
ID17010303PN011_02	Willow Creek - source to mouth	7.58	MILES
ID17010303PN012_02	Evans Creek - source to mouth	12.26	MILES
ID17010303PN012_03	Evans Creek - source to mouth	2.47	MILES
ID17010303PN013_02	Robinson Creek - source to mouth	12.15	MILES
ID17010303PN014_02	Bull Run Creek Stream Order 1 & 2	4.54	MILES
ID17010303PN014_02L	Bull Run Lake	79.07	ACRES
ID17010303PN015_02L	Crystal Lake	8.93	ACRES
ID17010303PN016_02	Coeur d'Alene River - South Fork Coeur d'Alene River to Lato	3.93	MILES
ID17010303PN017_02	Skeel and Cataldo Creeks - source to mouth	10.94	MILES
ID17010303PN018_02	French Gulch - source to mouth	10	MILES
ID17010303PN019_02	Hardy and Hayden Gulch and Whitman Draw Creeks Complex	10.87	MILES
ID17010303PN021L_0L	Rose Lake	316.29	ACRES
ID17010303PN022_03	Tributary to Killarney Lake	1.58	MILES
ID17010303PN023_02	Tributaries to Swan Lake	6.49	MILES
ID17010303PN023L_0L	Swan Lake	444.79	ACRES
ID17010303PN024L_0L	Blue Lake	227.34	ACRES
ID17010303PN025L_0L	Thompson Lake	173.4673	ACRES
ID17010303PN034_02a	Fernan Creek	0.69	MILES

17010304 St. Joe

ID17010304PN001_02	01 & 02 Tribs to Chatcolet Lake	4.77	MILES
ID17010304PN001L_0L	Chatcolet Lake	3545.96	ACRES
ID17010304PN002_02	Plummer Creek - source to mouth	46.9	MILES
ID17010304PN002_03	Plummer Creek - source to mouth	9.14	MILES
ID17010304PN002_04	Plummer Creek - source to mouth	2.27	MILES
ID17010304PN003_02	Pedee Creek - source to mouth	7.48	MILES
ID17010304PN004_02	Benewah Creek - source to mouth	59.55	MILES
ID17010304PN004_03	Benewah Creek - source to mouth	11.33	MILES
ID17010304PN005_02	St. Joe River - St. Maries River to mouth	15.88	MILES
ID17010304PN005_06	St. Joe River - St. Maries River to mouth	9.2	MILES
ID17010304PN006_02	Cherry Creek - source to mouth	7.9	MILES
ID17010304PN007_02	St. Maries River - Santa Creek to mouth	14.36	MILES
ID17010304PN007_02a	Soldier Creek	5.74	MILES
ID17010304PN007_02b	1st and 2nd order tributaries to St. Maries River from Santa	42.2	MILES
ID17010304PN012_02	St. Maries River - Carpenter Creek to Santa Creek	25.04	MILES
ID17010304PN015_02	St. Maries River - confluence of West Fork and Middle Fork S	30.5	MILES
ID17010304PN031_02	Marble Creek - Hobo Creek to mouth	21.89	MILES

ID17010304PN035_02	Marble Creek - source to Hobo Creek	32.93	MILES
ID17010304PN035_02L	Crater Lake	3.84	ACRES
ID17010304PN038_02	Boulder Creek - source to mouth	20.66	MILES
ID17010304PN039_02L	Crow Lake - Red Raven Creek	1.81	ACRES
ID17010304PN041_01L	Halo, Bacon and Forage Lakes	18.99	ACRES
ID17010304PN041_02L	Saint Joe and Frog Lakes	20.52	ACRES
ID17010304PN045_02L	Dismal Lake	5.96	ACRES
ID17010304PN049_02	Copper Creek - source to mouth	5.35	MILES
ID17010304PN059_04	North Fork St. Joe River - Loop Creek to mouth	10.15	MILES
ID17010304PN062_02	Slate Creek - source to mouth	57.65	MILES
ID17010304PN064_02	Trout Creek - source to mouth	15.41	MILES
ID17010304PN065_02	Falls Creek - source to mouth	9.59	MILES
ID17010304PN068_02	Street Creek - source to mouth	10.42	MILES
ID17010304PN069_02	Deep Creek - source to mouth	21.37	MILES

17010305 Upper Spokane

ID17010305PN001_02	Liberty Creek - source to Idaho/Washington border	6.41	MILES
ID17010305PN002_03	Cable Creek - source to Idaho/Washington border	0.44	MILES
ID17010305PN003_02	Skalan Creek	4.59	MILES
ID17010305PN004_02	Tributaries to Spokane River - CDA Lake to Post Falls Dam	6.12	MILES
ID17010305PN004_02a	Blackwell Island Canal	0.76	MILES
ID17010305PN004_02b	Nettleton Gulch	3.81	MILES
ID17010305PN005_01L	Avondale Lake	57.32	ACRES
ID17010305PN005_02	Hayden Lake Tributaries to Lake and Rathdrum aquifer	23.73	MILES
ID17010305PN005_02L	Alpine and Avondale Lakes	130.64	ACRES
ID17010305PN005_0L	Chilco Lake	33.5	ACRES
ID17010305PN006_02	Yellowbanks Creek - source to mouth	6.96	MILES
ID17010305PN007_02	Jim Creek - source to mouth	2.49	MILES
ID17010305PN013_02	Twin Lakes	4.85	MILES
ID17010305PN015_03	Hauser Lake outlet - Hauser Lake to aquifer	3.21	MILES
ID17010305PN016_02	01 & 02 tribs to Hauser Lake	9.25	MILES

17010306 Hangman

ID17010306PN001_03a	Hangman Creek Tribal Boundary to WA State Line	18.71	MILES
ID17010306PN002_02	Little Hangman Creek - source to Idaho/Washington border	68.26	MILES
ID17010306PN002_03	Moctileme Creek	8.54	MILES
ID17010306PN002_04	Little Hangman Creek	3.89	MILES
ID17010306PN003_02	Rock Creek	15.91	MILES
ID17010306PN004_02	Rose Creek	24.01	MILES

ID17010306PN004_03	Middle Fork Rock Creek - source to Idaho/Washington border	1.8	MILES
ID17010306PN005_02	North Fork Rock Creek	35.88	MILES
ID17010306PN005_03	North Fork Rock Creek - source to Idaho/Washington border	6.11	MILES

17010308 Little Spokane

ID17010308PN001_02	McDonald Creek - source to mouth	18.14	MILES

Salmon

17060101 Hells Canyon

ID17060101SL001_02	Snake River - Wolf Creek to Salmon River	44.11	MILES
ID17060101SL002_02	Snake River - Sheep Creek to Wolf Creek	18.69	MILES
ID17060101SL003_02	Snake River - Hells Canyon Dam to Sheep Creek	6.11	MILES
ID17060101SL005_02	Brush Creek - source to mouth	1.68	MILES
ID17060101SL006_03	Granite Creek - 3rd order (Devils Farm Creek to mouth)	3.11	MILES
ID17060101SL007_02	Little Granite Creek - source to mouth	6.76	MILES
ID17060101SL007_02L	Little Granite Creek Lakes	77.89	ACRES
ID17060101SL008_02	Bernard Creek - source to mouth	4.51	MILES
ID17060101SL009_03	Sheep Creek - confluence of West and East Fork Sheep Cree	5.96	MILES
ID17060101SL010_02L	Sheep Creek Lakes	80.05	ACRES
ID17060101SL013_02	Caribou Creek - source to mouth	3.47	MILES
ID17060101SL014_02	Kirkwood Creek - source to mouth	20.49	MILES
ID17060101SL014_03	Kirkwood Creek - source to mouth	1.97	MILES
ID17060101SL015_02	Kirby Creek - source to mouth	4.27	MILES
ID17060101SL016_02	Corral Creek - source to mouth	12.22	MILES
ID17060101SL017_02	Klopton Creek - source to mouth	10.65	MILES
ID17060101SL018_02	Kurry Creek - source to mouth	12.96	MILES
ID17060101SL019_02	West Creek - source to mouth	6.05	MILES
ID17060101SL020_02	Big Canyon Creek - source to mouth	12.3	MILES
ID17060101SL020_03	Big Canyon Creek - source to mouth	3.76	MILES
ID17060101SL021_02	Jones Creek - source to mouth	2.69	MILES
ID17060101SL022_02	Highrange Creek - source to mouth	5.69	MILES
ID17060101SL024_02	Wolf Creek - Basin Creek to mouth	11.63	MILES
ID17060101SL026_02	Basin Creek - source to mouth	12.75	MILES
ID17060101SL027_02	Dry Creek - source to mouth	1.72	MILES
ID17060101SL027_03	Dry Creek - source to mouth	1.78	MILES

17060103 Lower Snake-Asotin

ID17060103SL001_02	Snake River - Asotin Creek (Idaho/Oregon border) to Lower Gr	3.75	MILES

ID17060103SL002_02	Snake River - Captain John Creek to Asotin Creek (Idaho/Ore	16.57	MILES
ID17060103SL002_08	Snake River - Captain John Creek to Asotin Creek	17.02	MILES
ID17060103SL003_02	Snake River - Cottonwood Creek to Captain John Creek	34.82	MILES
ID17060103SL003_08	Snake River - Cottonwood Creek to Captain John Creek	19.95	MILES
ID17060103SL004_02	Snake River - Salmon River to Cottonwood Creek	17.37	MILES
ID17060103SL005_02	Cottonwood Creek - source to mouth	15.04	MILES
ID17060103SL005_03	Cottonwood Creek - source to mouth	1.66	MILES
ID17060103SL006_02	Cave Gulch - source to mouth	7.16	MILES
ID17060103SL008_02	Middle Creek - source to mouth	3.54	MILES
ID17060103SL009_02	Dough Creek - source to mouth	4.15	MILES
ID17060103SL010_02	Billy Creek - source to mouth	6.6	MILES
ID17060103SL011_02	Captain John Creek - source to mouth	37.27	MILES
ID17060103SL011_02L	Lake Waha	94.14	ACRES
ID17060103SL011_03	Captain John Creek - source to mouth	4.15	MILES
ID17060103SL012_02	Redbird Creek - source to mouth	10.9	MILES
ID17060103SL013_02	Tenmile Canyon - source to mouth	16.57	MILES
ID17060103SL013_03	Tenmile Canyon - source to mouth	1.44	MILES
ID17060103SL015_02	Unnamed Tributary - source to mouth (T34N, R05W, Sec. 24)	6.22	MILES

17060201 Upper Salmon

ID17060201SL001_03	Salmon River - Pennal Gulch to Pahsimeroi River	17.54	MILES
ID17060201SL001_06	Salmon River - Pennal Gulch to Pahsimeroi River	25.86	MILES
ID17060201SL002_02	Morgan Creek - West Creek to mouth	22.44	MILES
ID17060201SL007_02	Challis Creek - Darling Creek to mouth	2.47	MILES
ID17060201SL008_02	Darling Creek - source to mouth	20.08	MILES
ID17060201SL011_02L	Spruce Gulch Lake	10.93	ACRES
ID17060201SL012_02L	Mosquito Flat Reservoir	40.1	ACRES
ID17060201SL014_02	Salmon River - Garden Creek to Pennal Gulch	48.66	MILES
ID17060201SL014_03	Salmon River - Garden Creek to Pennal Gulch	6.3	MILES
ID17060201SL014_04	Salmon River - Garden Creek to Pennal Gulch	2.72	MILES
ID17060201SL014_06	Salmon River - Garden Creek to Pennal Gulch	10.82	MILES
ID17060201SL015_02L	Buster Lake	11.44	ACRES
ID17060201SL016_02L	Unnamed Diversion - Trib to Salmon R	7.17	ACRES
ID17060201SL016_03	Salmon River - East Fork Salmon River to Garden Creek	2.33	MILES
ID17060201SL016_04	Salmon River - East Fork Salmon River to Garden Creek	2.25	MILES
ID17060201SL016_06	Salmon River - East Fork Salmon River to Garden Creek	15.93	MILES
ID17060201SL017_01L	Little Bayhorse Lake	15.03	ACRES
ID17060201SL017_02L	Bayhorse Lake	25.15	ACRES
ID17060201SL018_02	Lyon Creek - source to mouth	8.82	MILES

ID17060201SL024_02L	Unnamed Lake - Trail Creek	3.68	ACRES
ID17060201SL025_02	Cinnabar Creek - source to mouth	12.65	MILES
ID17060201SL027_02	Salmon River - Thompson Creek to Squaw Creek	21.12	MILES
ID17060201SL027_03	Salmon River - Thompson Creek to Squaw Creek	3.1	MILES
ID17060201SL029_02	Pat Hughes Creek -source to mouth	2.95	MILES
ID17060201SL031_02L	Elk Lake	4.1	ACRES
ID17060201SL033_02	Ramey Creek - source to mouth	12.21	MILES
ID17060201SL034_02L	Unnamed Lakes - Trib to Yankee Fork	5.05	ACRES
ID17060201SL041_02	Jordan Creek - from and including Unnamed Tributary (T13N,	3.93	MILES
ID17060201SL042_02	Jordan Creek - source to Unnamed Tributary (T13N, R15E, Se	17.28	MILES
ID17060201SL043_02	West Fork Yankee Fork Creek - Lightning Creek to mouth	18.37	MILES
ID17060201SL043_03	West Fork Yankee Fork Creek - Lightning Creek to mouth	5.23	MILES
ID17060201SL044_02	Lightning Creek - source to mouth	18.17	MILES
ID17060201SL045_02	West Fork Yankee Fork Creek - source to Lightning Creek	21.27	MILES
ID17060201SL045_02L	West Fork Yankee Fork Lakes	16.67	ACRES
ID17060201SL045_03	West Fork Yankee Fork Creek - source to Lightning Creek	2.19	MILES
ID17060201SL046_02	Cabin Creek - source to mouth	9.52	MILES
ID17060201SL046_02L	Crimson Lake (Cabin Creek)	17.49	ACRES
ID17060201SL048_02	Basin Creek - East Basin Creek to mouth	3.15	MILES
ID17060201SL049_02L	East Basin Lakes	13.45	ACRES
ID17060201SL050_04	Basin Creek - source to East Basin Creek	0.09	MILES
ID17060201SL051_03	Valley Creek - Trap Creek to mouth	6.37	MILES
ID17060201SL052_02	Stanley Creek - source to mouth	16.99	MILES
ID17060201SL052_03	Stanley Creek - source to mouth	1.86	MILES
ID17060201SL053_02	Valley Creek - source to Trap Creek	29.67	MILES
ID17060201SL053_02L	Valley Creek Lakes	25.32	ACRES
ID17060201SL054_02	Trap Creek - Meadow Creek to mouth	4.65	MILES
ID17060201SL055_02L	Kelly and Martin Lakes	9.08	ACRES
ID17060201SL058_01L	Hanson Lakes	27.12	ACRES
ID17060201SL058_02L	Stanley Lake	176.13	ACRES
ID17060201SL058_0L	McGown Lakes	9.11	ACRES
ID17060201SL059_02	Crooked Creek - source to mouth	6.65	MILES
ID17060201SL060_01L	Alpine Lake	21.48	ACRES
ID17060201SL060_02L	Sawtooth Lake	169.91	ACRES
ID17060201SL061_02	Goat Creek - source to mouth	9.92	MILES
ID17060201SL061_02L	Goat Lakes	50.71	ACRES
ID17060201SL061_03	Goat Creek - source to mouth	0.03	MILES
ID17060201SL062_02	Meadow Creek - source to mouth	8.18	MILES

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ID17060201SL062_02L	Marshall Lake	4.15	ACRES
ID17060201SL062_03	Meadow Creek - source to mouth	2.49	MILES
ID17060201SL063_02	Salmon River - Redfish Lake Creek to Valley Creek	6.12	MILES
ID17060201SL064_03	Redfish Lake Creek - Redfish Lake to mouth	2.58	MILES
ID17060201SL064_03L	Little Redfish Lake	64.08	ACRES
ID17060201SL065_01L	Stephens Lakes	14.54	ACRES
ID17060201SL065_02L	Unamed Lake to Fish Hook Creek trib	18.03	ACRES
ID17060201SL066_02	Fishhook Creek	8.88	MILES
ID17060201SL066_02L	Bench Lakes	61.09	ACRES
ID17060201SL066L_0L	Redfish Lake	1512.28	ACRES
ID17060201SL067_01L	Saddleback Lakes	24.1	ACRES
ID17060201SL067_03	Redfish Lake Creek - source to Redfish Lake	3.94	MILES
ID17060201SL070_02L	Decker Creek Lakes	6.06	ACRES
ID17060201SL072_02	Salmon River - Fisher Creek to Decker Creek	2.51	MILES
ID17060201SL073_02	Salmon River - Alturas Lake Creek to Fisher Creek	5.15	MILES
ID17060201SL074_02L	Hell Roaring Creek Lakes	186.09	ACRES
ID17060201SL075_01L	Cabin Creek Lakes	17.14	ACRES
ID17060201SL075_02L	Yellow Belly Lake	195.27	ACRES
ID17060201SL075_04	Alturas Lake Creek - Alturas Lake to mouth	7.46	MILES
ID17060201SL075_04L	Perkins Lake	48.1	ACRES
ID17060201SL076_01L	McDonald Lake	13.91	ACRES
ID17060201SL076_02	Toxaway/Farley Lake - source to mouth	12.32	MILES
ID17060201SL076_02L	Toxaway Lakes	138.47	ACRES
ID17060201SL076_0L	Farley Lake	31.97	ACRES
ID17060201SL077_02	Petit Lake Stream order 1 & 2	10.57	MILES
ID17060201SL077_02L	Pettit Lake	390.08	ACRES
ID17060201SL077_03L	Twin Lakes	44.39	ACRES
ID17060201SL077_0L	Alice Lakes	79.13	ACRES
ID17060201SL078_02	01 & 02 tribs to Alturas Lake	1.49	MILES
ID17060201SL078L_0L	Alturas Lake	825.33	ACRES
ID17060201SL079_02	Alturas Lake Creek - source to Alturas Lake	13.4	MILES
ID17060201SL079_03	Alturas Lake Creek - source to Alturas Lake	2.61	MILES
ID17060201SL084_02	Frenchman Creek - source to mouth	9.42	MILES
ID17060201SL086_02	Champion Creek - source to mouth	19.67	MILES
ID17060201SL086_02L	Champion Lakes (Champion Creek - Source to Mouth)	40.07	ACRES
ID17060201SL087_01L	Fourth of July Lake	7.15	ACRES
ID17060201SL087_02L	Heart and Six Lakes	10.04	ACRES
ID17060201SL088_03	Fisher Creek - source to mouth	0.71	MILES

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ID17060201SL089_03	Williams Creek - source to mouth	1.46	MILES
ID17060201SL093_02L	Rough Lake	10.46	ACRES
ID17060201SL094_02	Warm Springs Creek - Swimm Creek to mouth	25.83	MILES
ID17060201SL094_02L	Unnamed Lake - Trib to Warm Springs Creek	3.85	ACRES
ID17060201SL095_02L	Garland Lakes	4.56	ACRES
ID17060201SL099_01L	Crater Lake (Slate Creek)	17.78	ACRES
ID17060201SL099_02L	Ocalkens Lakes	15.84	ACRES
ID17060201SL099_0L	Hoodoo Lake	4.94	ACRES
ID17060201SL100_02	Holman Creek - source to mouth	9.31	MILES
ID17060201SL101_02	Sullivan Creek - source to mouth	14.54	MILES
ID17060201SL101_03	Sullivan Creek - source to mouth	3.48	MILES
ID17060201SL101_03L	Sulivan Lake	42	ACRES
ID17060201SL102_02	East Fork Salmon River - Herd Creek to mouth	28.24	MILES
ID17060201SL102_05	East Fork Salmon River - Herd Creek to mouth	10.38	MILES
ID17060201SL103_04	East Fork Salmon River - Germania Creek to Herd Creek	15.65	MILES
ID17060201SL104_02	Big Lake Creek - source to mouth	34.37	MILES
ID17060201SL104_03L	Jimmy Smith Lake	64.26	ACRES
ID17060201SL105_01L	Unnamed Lake - Trib to Big Boulder Creek	3.08	ACRES
ID17060201SL105_02L	Big Boulder Lakes	142.7	ACRES
ID17060201SL105_0L	Island and Goat Lakes	22.64	ACRES
ID17060201SL106_01L	Boulder Chain Lakes	95.9	ACRES
ID17060201SL106_02L	Quiet Lakes	58.14	ACRES
ID17060201SL106_0L	Frog Lakes-Spring Basin	16	ACRES
ID17060201SL109_02L	Deer Lakes	13.81	ACRES
ID17060201SL110_02	East Fork Salmon River - confluence of South and West Fork	20.42	MILES
ID17060201SL110_03	East Fork Salmon River - confluence of South and West Fork	5.88	MILES
ID17060201SL111_02	West Fork East Fork Salmon River - source to mouth	9.96	MILES
ID17060201SL115_02	Bowery Creek - source to mouth	24.41	MILES
ID17060201SL115_03	Bowery Creek - source to mouth	1.7	MILES
ID17060201SL116_02	Pine Creek - source to mouth	13.14	MILES
ID17060201SL117_02	McDonald Creek - source to mouth	10.14	MILES
ID17060201SL118_02	Herd Creek - confluence of West Fork Herd Creek and East P	23.73	MILES
ID17060201SL119_02	East Pass Creek - source to mouth	38.66	MILES
ID17060201SL119_03	East Pass Creek - source to mouth	3.43	MILES
ID17060201SL120_02	Taylor Creek - source to mouth	7.95	MILES
ID17060201SL121_02	West Fork Herd Creek - source to mouth	21.83	MILES
ID17060201SL121_03	West Fork Herd Creek - source to mouth	3.93	MILES
ID17060201SL122_02	East Fork Herd Creek - source to mouth	17.59	MILES

ID17060201SL122_03	East Fork Herd Creek - source to mouth	2.29	MILES
ID17060201SL124_02	Road Creek - Corral Basin Creek to mouth	17.02	MILES
ID17060201SL127_02	Corral Basin Creek - source to mouth	14.94	MILES
ID17060201SL127_03	Corral Basin Creek - source to mouth	1.57	MILES
ID17060201SL128_02	Horse Basin Creek - source to mouth	21.2	MILES
ID17060201SL128_03	Horse Basin Creek - source to mouth	4.47	MILES
ID17060201SL129_02	Spar Canyon Creek - source to mouth	44.33	MILES
ID17060201SL129_03	Spar Canyon Creek - source to mouth	7.22	MILES
ID17060201SL130_02	Bradshaw Gulch - source to mouth	14.74	MILES
ID17060201SL131_02	Warm Spring Creek - Hole-in-Rock Creek to mouth	39.28	MILES
ID17060201SL131_03	Warm Spring Creek - Hole-in-Rock Creek to mouth	3.3	MILES
ID17060201SL131_04L	Warm Springs Creek Pond	35.39	ACRES
ID17060201SL134_02	Hole-in-Rock Creek - source to mouth	18.83	MILES
ID17060201SL135_02	Pennal Gulch - source to mouth	10.11	MILES

17060202 Pahsimeroi

ID17060202SL001_02	Pahsimeroi River - Patterson Creek to mouth	49.16	MILES
ID17060202SL001_03	Pahsimeroi River - Patterson Creek to mouth	4.06	MILES
ID17060202SL002_03	Pahsimeroi River - Meadow Creek to Patterson Creek	1.11	MILES
ID17060202SL004_03	North Fork Lawson Creek - source to mouth	1.9	MILES
ID17060202SL008_02	Pahsimeroi River - Big Creek to Furley Road (T15S, R22E)	3.94	MILES
ID17060202SL009_02L	Grouse Creek Lakes	10.9	ACRES
ID17060202SL010_02	Pahsimeroi River - Goldburg Creek to Big Creek	55.52	MILES
ID17060202SL012_02	Unnamed Tributary - source to mouth (T12N, R23E, Sec. 22)	13.52	MILES
ID17060202SL012_03	Unnamed Tributary - source to mouth (T12N, R23E, Sec. 22)	17.44	MILES
ID17060202SL013_02	Doublespring Creek - Christian Gulch to mouth	3.32	MILES
ID17060202SL013_03	Doublespring Creek - Christian Gulch to mouth	5.45	MILES
ID17060202SL014_02	Christian Gulch - source to mouth	17.86	MILES
ID17060202SL015_02	Doublespring Creek - source to Christian Gulch	27.9	MILES
ID17060202SL015_03	Doublespring Creek - source to Christian Gulch	4.65	MILES
ID17060202SL016_02	Mud Spring Canyon Complex	25.28	MILES
ID17060202SL017_02	Pahsimeroi River - Burnt Creek to Unnamed Tributary (T12N,	4.84	MILES
ID17060202SL019_02	Mahogany Creek - source to mouth	17.84	MILES
ID17060202SL020_02	Pahsimeroi River - confluence of Rock Creek and East Fork P	5.27	MILES
ID17060202SL021_02	Rock Creek - source to mouth	5.51	MILES
ID17060202SL022_01L	Merriam Lakes	7.39	ACRES
ID17060202SL022_02L	East Fork Pahsimeroi River Lakes	11.49	ACRES
ID17060202SL023_02	Burnt Creek - Long Creek to mouth	10.89	MILES
ID17060202SL025_02	Long Creek - Short Creek to mouth	4.91	MILES

ID17060202SL025_03	Long Creek - Short Creek to mouth	1.69	MILES
ID17060202SL027_02	Long Creek - source to Short Creek	26.76	MILES
ID17060202SL027_03	Long Creek - source to Short Creek	1.11	MILES
ID17060202SL028_02	Goldburg Creek - Donkey Creek to mouth	22.56	MILES
ID17060202SL030_03	Goldburg Creek - source to Donkey Creek	2.36	MILES
ID17060202SL034_02	Patterson Creek - Inyo Creek to mouth	7.68	MILES
ID17060202SL034_03L	Patterson Creek Tailings Ponds	33.01	ACRES
ID17060202SL035_02L	Unnamed Lake - Patterson Creek	3.16	ACRES
ID17060202SL037_02	Morse Creek - Irrigation junction to mouth	7.6	MILES
ID17060202SL037_03	Morse Creek - Irrigation junction to mouth	4.58	MILES
ID17060202SL038_02	Morse Creek - source to Irrigation junction (T15S, R23E)	18.93	MILES
ID17060202SL039_02	Morgan Creek - source to mouth	47.03	MILES
ID17060202SL039_04	Morgan Creek - source to mouth	0.81	MILES

17060203 Middle Salmon-Panther

ID17060203SL001_02L	Dome Lake	17.29	ACRES
ID17060203SL001_07	Salmon River - Panther Creek to Middle Fork Salmon River	11.94	MILES
ID17060203SL002_02	Panther Creek - Big Deer Creek to mouth	27.1	MILES
ID17060203SL004_02L	Big Clear Creek Lakes	29.72	ACRES
ID17060203SL005_02	Big Deer Creek - South Fork Big Deer Creek to mouth	3.45	MILES
ID17060203SL006_02	Big Deer Creek - source to South Fork Big Deer Creek	21.19	MILES
ID17060203SL006_02L	Cathedral and Golden Trout Lakes	25.84	ACRES
ID17060203SL008_02	South Fork Big Deer Creek -source to Bucktail Creek	2.93	MILES
ID17060203SL013a_02	West Fork Blackbird Creek - source to concrete channel	7.87	MILES
ID17060203SL013b_02	West Fork Blackbird Creek - concrete channel to mouth only	0.61	MILES
ID17060203SL017_02L	Opal Lake	13.81	ACRES
ID17060203SL018_02L	Unnamed Lake - SF Moyer Creek	5.73	ACRES
ID17060203SL019_02	Woodtick Creek - source to mouth	12.52	MILES
ID17060203SL021_02	Little Deep Creek - source to mouth	13.5	MILES
ID17060203SL023_02	Napias Creek - Moccasin Creek to mouth	1.86	MILES
ID17060203SL028_03	Beaver Creek - source to mouth	1.97	MILES
ID17060203SL029_02	Salmon River - Indian Creek to Panther Creek	26.1	MILES
ID17060203SL029_07	Salmon River - Indian Creek to Panther Creek	17.86	MILES
ID17060203SL032_03	Salmon River - North Fork Sheep Creek to Indian Creek	2.65	MILES
ID17060203SL032_07	Salmon River - North Fork Sheep Creek to Indian Creek	11.79	MILES
ID17060203SL033_02	Moose Creek - Little Moose Creek to mouth	5.15	MILES
ID17060203SL033_03	Moose Creek - Little Moose Creek to mouth	2.09	MILES
ID17060203SL034_02	Little Moose Creek - source to mouth	5.5	MILES
ID17060203SL035_02	Moose Creek - Dolly Creek to Little Moose Creek	7.97	MILES

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ID17060203SL038_02	Dump Creek - Moose Creek to mouth	3.2	MILES
ID17060203SL041_02	Salmon River - Pollard Creek to Carmen Creek	30.64	MILES
ID17060203SL041_02L	UP Lake	3.88	ACRES
ID17060203SL041_06	Salmon River - Pollard Creek to Carmen Creek	3.32	MILES
ID17060203SL042_02a	Chipps & Jesse Creek	23.84	MILES
ID17060203SL042_03	Salmon River - Williams Creek to Pollard Creek	1.24	MILES
ID17060203SL046_02	Salmon River - Twelvemile Creek to Williams Creek	21.02	MILES
ID17060203SL047_02L	Williams Lake	179.98	ACRES
ID17060203SL050_02L	Iron Lake(s)	23.14	ACRES
ID17060203SL050_03	Iron Creek - source to North Fork Iron Creek	0.22	MILES
ID17060203SL051_03	West Fork Iron Creek - source to mouth	2.23	MILES
ID17060203SL053_07	Salmon River - Pahsimeroi River to Iron Creek	9.76	MILES
ID17060203SL054_02	Hot Creek - source to mouth	89.89	MILES
ID17060203SL054_04	Hot Creek - source to mouth	2.46	MILES
ID17060203SL055_02L	Goat Lake	4.7	ACRES
ID17060203SL055_03	Cow Creek - source to mouth	4.2	MILES
ID17060203SL057_02	McKim Creek - source to mouth	22.21	MILES
ID17060203SL057_02L	Unnamed Lakes- Trib to McKim Creek	3.88	ACRES
ID17060203SL058_02	Poison Creek - source to mouth	22.56	MILES
ID17060203SL058_03	Poison Creek - source to mouth	2	MILES
ID17060203SL059_02	Warm Springs Creek - source to mouth	20.25	MILES
ID17060203SL060_02	Twelvemile Creek - source to mouth	17.02	MILES
ID17060203SL061_02	Carmen Creek - Freeman Creek to mouth	14.38	MILES
ID17060203SL065_03	Fourth of July Creek - Little Fourth of July Creek to mouth	1.66	MILES
ID17060203SL066_03	Fourth of July Creek - source to Little Fourth of July Creek	1.53	MILES
ID17060203SL067_02	Little Fourth of July Creek - source to mouth	4.95	MILES
ID17060203SL068_02	North Fork Salmon River - Hughes Creek to mouth	6.47	MILES
ID17060203SL068_04	North Fork Salmon River - Hughes Creek to mouth	5.71	MILES
ID17060203SL069_02	Big Silverlead Creek - source to mouth	10.26	MILES
ID17060203SL070_02	North Fork Salmon River - Sheep Creek to Hughes Creek	4.76	MILES
ID17060203SL070_04	North Fork Salmon River - Sheep Creek to Hughes Creek	2.97	MILES
ID17060203SL071_02	Sheep Creek - source to mouth	34.06	MILES
ID17060203SL072_02	North Fork Salmon River - Dahlonega Creek to Sheep Creek	6.96	MILES
ID17060203SL072_04	North Fork Salmon River - Dahlonega Creek to Sheep Creek	3.3	MILES
ID17060203SL073_03	Dahlonega Creek - Nez Perce Creek to mouth	4.67	MILES
ID17060203SL075_02	Nez Perce Creek - source to mouth	7.3	MILES
ID17060203SL078_03	North Fork Salmon River - source to Twin Creek	3.42	MILES
ID17060203SL079_02	Pierce Creek - source to mouth	10.34	MILES

ID17060203SL082_02	Hull Creek - source to mouth	10.47	MILES
ID17060203SL082_02L	Cummings Lake	6.35	ACRES
ID17060203SL082_03	Hull Creek - source to mouth	0.65	MILES
ID17060203SL083_02	Indian Creek - source to mouth	40.93	MILES
ID17060203SL087_02	Owl Creek - East Fork Owl Creek to mouth	1.92	MILES
ID17060203SL088_02	East Fork Owl Creek - source to mouth	13.22	MILES
ID17060203SL089_02	Owl Creek - source to East Fork Owl Creek	25.64	MILES
ID17060203SL089_03	Owl Creek - source to East Fork Owl Creek	7.54	MILES

17060204 Lemhi

ID17060204SL003a_06	Withington Creek - diversion (T20N, R23E, Sec. 09) to mouth	3.59	MILES
ID17060204SL004_06	Haynes Creek - source to mouth	2.63	MILES
ID17060204SL005_02	Lemhi River - Hayden Creek to Kenney Creek	27.28	MILES
ID17060204SL006_02	Baldy Creek - source to mouth	9.72	MILES
ID17060204SL007a_02	McDevitt Creek - diversion (T19N, R23E, Sec. 36) to mouth	2.12	MILES
ID17060204SL008_02	Muddy Creek - source to mouth	10.86	MILES
ID17060204SL009_02	Hayden Creek - Basin Creek to mouth	3.45	MILES
ID17060204SL010_02	Basin Creek - Lake Creek to mouth	3.55	MILES
ID17060204SL011_02	Basin Creek - confluence of McNutt Creek and Trail Creek to	9.12	MILES
ID17060204SL011_04	Basin Creek - confluence of McNutt Creek and Trail Creek to	1.71	MILES
ID17060204SL012_02	Trail Creek - source mouth	19.41	MILES
ID17060204SL012_03	Trail Creek - source mouth	1.38	MILES
ID17060204SL013_03	McNutt Creek - source to mouth	1.4	MILES
ID17060204SL013_0L	Unnamed Lakes -McNutt Creek	7.95	ACRES
ID17060204SL014_01L	Lake Creek Reservoir	7.32	ACRES
ID17060204SL014_02	Lake Creek - source to mouth	7.06	MILES
ID17060204SL015_02	Hayden Creek - Bear Valley Creek to Basin Creek	8.67	MILES
ID17060204SL016_02	Bear Valley Creek -Wright Creek to mouth	6.02	MILES
ID17060204SL017_01L	Bear Valley Lakes - Bear Valley Creek	42.54	ACRES
ID17060204SL017_02L	Buck Lakes	11.98	ACRES
ID17060204SL018_02L	Wright Creek Lakes	9.26	ACRES
ID17060204SL022_02L	Unnamed Lakes - West Fork Hayden Creek and Bray Creek	10.23	ACRES
ID17060204SL023_02L	Buffalo Skull Lake	4.11	ACRES
ID17060204SL024_02	Lemhi River - Peterson Creek to Hayden Creek	41.17	MILES
ID17060204SL024_02L	Bates Gulch Lake	4.01	ACRES
ID17060204SL024_03	Lemhi River - Peterson Creek to Hayden Creek	1.21	MILES
ID17060204SL025_02	Lemhi River - confluence of Big and Little Eightmile Creeks	10.16	MILES
ID17060204SL026b_02L	Mill Creek Lakes	32.59	ACRES
ID17060204SL028_02L	Unnamed Lake - Stroud Creek	3.33	ACRES

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ID17060204SL028_03	Lee Creek - source to mouth	4.29	MILES
ID17060204SL029b_02	Big Eightmile Creek - source to diversion (T16N, R25E, Sec.	18.1	MILES
ID17060204SL030_02	Lemhi River - confluence of Eighteenmile Creek and Texas Cr	38.28	MILES
ID17060204SL030_03	Lemhi River - confluence of Eighteenmile Creek and Texas Cr	6.88	MILES
ID17060204SL031_02	Big Timber Creek - Little Timber Creek to mouth	3.94	MILES
ID17060204SL032a_03	Little Timber Creek - diversion (T15N, R25E, Sec. 24) to mou	2.54	MILES
ID17060204SL032b_01L	Little Timber Creek Lakes	17.31	ACRES
ID17060204SL032b_02L	Stone Reservoir	20.25	ACRES
ID17060204SL033_02	Big Timber Creek - Rocky Creek to Little Timber Creek	15.11	MILES
ID17060204SL036_02	Texas Creek - Deer Creek to mouth	35.09	MILES
ID17060204SL037_02	Deer Creek - source to mouth	6.94	MILES
ID17060204SL037_02L	Deer Creek Lake	6.27	ACRES
ID17060204SL038_02	Texas Creek - Meadow Creek to Deer Creek	14.3	MILES
ID17060204SL038_03	Texas Creek - Meadow Creek to Deer Creek	1.9	MILES
ID17060204SL039_02	Meadow Lake Creek - source to mouth	4.94	MILES
ID17060204SL040_02	Texas Creek - source to Meadow Lake Creek	14.06	MILES
ID17060204SL042_02	Eighteenmile Creek - Clear Creek to Hawley Creek	5.53	MILES
ID17060204SL044_02	Divide Creek - source to mouth	29.56	MILES
ID17060204SL044_03	Divide Creek - source to mouth	2.73	MILES
ID17060204SL048_02	Tenmile Creek - source to Powderhorn Gulch	6.36	MILES
ID17060204SL049_02	Powderhorn Gulch - source to mouth	7.63	MILES
ID17060204SL050b_02	Hawley Creek - source to diversion (T15N, R27E, Sec. 03)	51.5	MILES
ID17060204SL051a_03	Canyon Creek - diversion (T16N, R26E, Sec.22) to mouth	1.45	MILES
ID17060204SL052b_02L	Little Eightmile Diversion	10.19	ACRES
ID17060204SL053_02	Peterson Creek - source to mouth	14.17	MILES
ID17060204SL054_02	Reese Creek - source to mouth	9.87	MILES
ID17060204SL055a_03	Yearian Creek - diversion (T17N, R24E, Sec. 03) to mouth	1.77	MILES
ID17060204SL055b_02	Yearian Creek - source to diversion (T17N, R24E, Sec. 03)	16.72	MILES
ID17060204SL056a_04	Agency Creek - diversion (T19N, R24E, Sec. 28) to mouth	1.98	MILES
ID17060204SL056b_04	Agency Creek - Cow Creek to diversion (T19N, R24E, Sec. 28	2.56	MILES
ID17060204SL057_02	Cow Creek - source to mouth	10	MILES
ID17060204SL058_03	Agency Creek - source to Cow Creek	2.05	MILES
ID17060204SL059a_03	Pattee Creek - diversion (T19N, R24E, Sec. 16) to mouth	0.88	MILES
ID17060204SL060a_02	Pratt Creek - diversion (T20N, R23E, Sec. 11) to mouth	0.44	MILES
ID17060204SL060b_02	Pratt Creek - source to diversion (T20N, R23E, Sec. 11)	3.56	MILES
ID17060204SL065a_03	Geertson Creek - diversion (T21N, R23E, Sec. 20) to mouth	0.93	MILES
ID17060204SL066a_02	Kirtley Creek - diversion (T21N, R22E, Sec. 02) to mouth	3.73	MILES

17060205 Upper Middle Fork Salmon

ID17060205SL007_02	Pistol and Little Pistol Creeks - 1st and 2nd order	128.43	MILES
ID17060205SL013_04a	Elk Creek - Wilderness Area	3.92	MILES
ID17060205SL016_01L	Lower Lost Lake	6.4	ACRES
ID17060205SL020_02	Cape Horn Creek - Banner Creek to mouth	8.31	MILES
ID17060205SL022_02L	Unnamed Wetlands near Bull Trout Lake	80.5	ACRES
ID17060205SL025_02L	Knapp Lakes	16.56	ACRES
ID17060205SL028_01L	Mabie Lakes	12.81	ACRES
ID17060205SL028_02L	Cape Horn Lakes	33.35	ACRES
ID17060205SL029_03	Beaver Creek - Winnemucca Creek to Bear Creek	2.93	MILES
ID17060205SL032_02L	Ruffneck Lake(s)	19.57	ACRES
ID17060205SL032_03	Bear Creek - source to mouth	1.18	MILES
ID17060205SL034_02	Greyhound Creek - source to mouth	9.43	MILES
ID17060205SL034_03	Greyhound Creek - source to mouth	1.97	MILES
ID17060205SL038_04	Rapid River - Float Creek to Lucinda Creek	4.65	MILES
ID17060205SL039_01L	Josephus Lake	4.02	ACRES
ID17060205SL039_02L	Josephus Lake	10.89	ACRES
ID17060205SL040_02	Rapid River - Vanity Creek to Float Creek	1.37	MILES
ID17060205SL040_04	Rapid River - Vanity Creek to Float Creek	1.42	MILES
ID17060205SL041_02L	Vanity Lakes	12.44	ACRES
ID17060205SL043_02	Lucinda Creek - source to mouth	4.18	MILES
ID17060205SL048_02	Loon Creek - Cabin Creek to mouth	69.86	MILES
ID17060205SL049_02	Loon Creek - Warm Springs Creek to Cabin Creek	18.1	MILES
ID17060205SL053_02	Loon Creek - Grouse Creek to Shell Creek	12.14	MILES
ID17060205SL053_04	Loon Creek - Grouse Creek to Shell Creek	2.97	MILES
ID17060205SL054_02	Grouse Creek - source to mouth	5.46	MILES
ID17060205SL055_04	Loon Creek - Canyon Creek to Grouse Creek	1.48	MILES
ID17060205SL056_02	Canyon Creek - source to mouth	7.92	MILES
ID17060205SL057_02	Loon Creek - Pioneer Creek to Canyon Creek	9.39	MILES
ID17060205SL057_04	Loon Creek - Pioneer Creek to Canyon Creek	3.57	MILES
ID17060205SL058_02	Trail Creek - source to mouth	15.27	MILES
ID17060205SL058_03	Trail Creek - source to mouth	1.22	MILES
ID17060205SL060_02	Pioneer Creek - source to mouth	14.76	MILES
ID17060205SL060_02L	Unnamed Lakes - Tango Creek	5.56	ACRES
ID17060205SL061_02	No Name Creek - source to mouth	1.38	MILES
ID17060205SL062_03	Mayfield Creek - confluence of East and West Fork Mayfield C	3.16	MILES
ID17060205SL063_02L	Mystery Lakes	26.05	ACRES
ID17060205SL069_02	Warm Springs Creek - source to Trapper Creek	18.26	MILES

17060206 Lower Middle Fork Salmon

ID17060206SL001_02	MF Salmon River - 1st and 2nd order below Loon Creek	172.97	MILES
ID17060206SL001_03	Norton and Stoddard Creeks - 3rd order	6.81	MILES
ID17060206SL001_06	Middle Fork Salmon River - Loon Creek to mouth	45.27	MILES
ID17060206SL002_03	Papoose Creek - 3rd order	2.99	MILES
ID17060206SL017_02	Soldier Creek - entire drainage	19.73	MILES
ID17060206SL018_02	Brush Creek - 1st and 2nd order	31.74	MILES
ID17060206SL018_03	Brush Creek - 3rd order (North Fork to mouth)	6.63	MILES
ID17060206SL019_03	Sheep Creek - 3rd order	7.97	MILES
ID17060206SL021_02L	Woodtick Lake	4.56	ACRES
ID17060206SL022_02	Camas Creek - Duck Creek to Forge Creek	10.85	MILES
ID17060206SL023_02	Camas Creek - Silver Creek to Duck Creek	5.06	MILES
ID17060206SL024_02L	Liberty Lakes	6.45	ACRES
ID17060206SL025_02	Camas Creek - Castle Creek to Silver Creek	1.99	MILES
ID17060206SL026_02	Camas Creek - Furnance Creek to Castle Creek	8.8	MILES
ID17060206SL027_02	Camas Creek - White Goat Creek to Furnance Creek	4.79	MILES
ID17060206SL031_02	White Goat Creek - source to mouth	5.48	MILES
ID17060206SL032_02	Furnace Creek - source to mouth	19.12	MILES
ID17060206SL034_02L	Arrastra Creek Lakes	6.84	ACRES
ID17060206SL034_03L	Boggerman Dam Reservoir	3.73	ACRES
ID17060206SL036_02	Forge Creek - source to mouth	6.15	MILES
ID17060206SL038_02L	Lake Creek	5.44	ACRES
ID17060206SL041_02	Yellowjacket Creek - Trail Creek to Little Jacket Creek	2.88	MILES
ID17060206SL046_01L	Paragon Lakes	12.51	ACRES
ID17060206SL046_02	Wilson Creek - source to mouth	29.64	MILES
ID17060206SL046_02L	Sky High Lakes	29.01	ACRES
ID17060206SL046_03	Wilson Creek - source to mouth	11.23	MILES
ID17060206SL046_0L	Wilson Creek Lakes	22.05	ACRES
ID17060206SL047_03	Waterfall Creek - source to mouth	1.3	MILES
ID17060206SL048_01L	Airplane and Shoband Lakes	18.01	ACRES
ID17060206SL048_02	Ship Island Creek - source to mouth	10.09	MILES
ID17060206SL048_02L	Ship Island Lake	85.63	ACRES
ID17060206SL049_02L	Roaring Creek Lakes	11.22	ACRES
ID17060206SL049_03	Roaring Creek - source to mouth	4.37	MILES
ID17060206SL050_02	Goat Creek - source to mouth	9.22	MILES

17060207 Middle Salmon-Chamberlain

ID17060207SL001_02	Salmon River - South Fork Salmon River to river mile 106 (T2	63.71	MILES
ID17060207SL002_02	Fall Creek - source to mouth	21.73	MILES
ID17060207SL004_02	California Creek - source to mouth	28.34	MILES

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ID17060207SL004_03	California Creek - source to mouth	2.04	MILES
ID17060207SL005_02	Cottontail Creek - source to mouth	5.64	MILES
ID17060207SL006_02	Rabbit Creek - source to mouth	8.28	MILES
ID17060207SL008_02	Salmon River - Chamberlain Creek to South Fork Salmon Rive	124.83	MILES
ID17060207SL009_03	Fivemile Creek - source to mouth	7.48	MILES
ID17060207SL010_02	Little Fivemile Creek - source to mouth	10.43	MILES
ID17060207SL011_02	Lemhi Creek - source to mouth	16.04	MILES
ID17060207SL012_02	Fall Creek - source to mouth	2.62	MILES
ID17060207SL013_02	Trout Creek - source to mouth	13.04	MILES
ID17060207SL014_03	Richardson Creek - source to mouth	3.93	MILES
ID17060207SL015_02	Dillinger Creek - source to mouth	14.69	MILES
ID17060207SL016_02	Hot Springs Creek - source to mouth	9.62	MILES
ID17060207SL017_02	Big Bear Creek - source to mouth	11.74	MILES
ID17060207SL018_02	Salmon River - Horse Creek to Chamberlain Creek	43.72	MILES
ID17060207SL019_05	Chamberlain Creek - McCalla Creek to mouth	4.21	MILES
ID17060207SL035_03	Cottonwood Creek - source to mouth	11.91	MILES
ID17060207SL038_02	Butts Creek - source to mouth	8.88	MILES
ID17060207SL039_02	Kitchen Creek - source to mouth	21.28	MILES
ID17060207SL042_02	Little Horse Creek - source to mouth	16.82	MILES
ID17060207SL043_02	Horse Creek - Reynolds Creek to Little Horse Creek	15.5	MILES
ID17060207SL043_04	Horse Creek - Reynolds Creek to Little Horse Creek	4.68	MILES
ID17060207SL044_02	Horse Creek - source to Reynolds Creek	35.65	MILES
ID17060207SL044_03	Horse Creek - source to Reynolds Creek	5.28	MILES
ID17060207SL045_02	East Fork Reynolds Creek - source to mouth	14.08	MILES
ID17060207SL046_03	Reynolds Creek - source to mouth	1.53	MILES
ID17060207SL048_02	Little Squaw Creek - source to mouth	6.92	MILES
ID17060207SL049_03	Harrington Creek - source to mouth	2.19	MILES
ID17060207SL050_04	Sabe Creek - Hamilton Creek to mouth	6.04	MILES
ID17060207SL052_02	Sabe Creek - source to Hamilton Creek	34.63	MILES
ID17060207SL054_02	Rattlesnake Creek - source to mouth	13.5	MILES
ID17060207SL055_02	Bargamin Creek - source to mouth	100.63	MILES
ID17060207SL056_02	Porcupine Creek - source to mouth	8.55	MILES
ID17060207SL064_02	Big Blowout Creek - source to mouth	7.55	MILES
ID17060207SL066_02	Indian Creek - source to mouth	8.81	MILES
ID17060207SL070_02	Lake Creek - source to mouth	51.3	MILES
ID17060207SL072_03	Bull Creek - source to mouth	4.54	MILES
ID17060207SL073_02	Elk Creek - source to mouth	9.44	MILES
ID17060207SL074_02	Sheep Creek - source to mouth	56.12	MILES

ID17060207SL074_03	Sheep Creek - source to mouth	8.43	MILES
ID17060207SL076_02	Wind River - source to mouth	37.54	MILES
ID17060207SL077_02	Meadow Creek - source to mouth	31.8	MILES
ID17060207SL077_03	Meadow Creek - source to mouth	6.34	MILES

17060208 South Fork Salmon

ID17060208SL002_02	Raines Creek - entire drainage	12.13	MILES
ID17060208SL013_02	Cougar Creek - 1st and 2nd order	16	MILES
ID17060208SL014_02	Blackmare Creek - 1st and 2nd order	19.23	MILES
ID17060208SL022_02	Camp Creek - 1st and 2nd order	34.21	MILES
ID17060208SL024_02	Caton Creek - 1st and 2nd order	37.39	MILES
ID17060208SL033_02	Sheep Creek - 1st and 2nd order	25.71	MILES
ID17060208SL033_03	Sheep and South Fork Sheep Creeks - 3rd order	4.08	MILES

17060209 Lower Salmon

ID17060209SL001_02	Salmon River - Rice Creek to mouth	131.4	MILES
ID17060209SL001_03	Salmon River - Rice Creek to mouth	1.37	MILES
ID17060209SL001_07	Salmon River - Rice Creek to mouth	37.36	MILES
ID17060209SL002_02	Flynn Creek - source to mouth	11.52	MILES
ID17060209SL005_02	Burnt Creek - source to mouth	4.18	MILES
ID17060209SL006_02	Round Spring Creek - source to mouth	9.16	MILES
ID17060209SL008_02	Salmon River - Slate Creek to Rice Creek	96.84	MILES
ID17060209SL009_02	Sotin Creek - source to mouth	4.34	MILES
ID17060209SL011_02	Salmon River - tributaries; Little Salmon R. to Slate Creek	60.46	MILES
ID17060209SL011_07	Salmon River - Little Salmon River to Slate Creek	19.81	MILES
ID17060209SL014_02	Race Creek - 1st order tributary	1.06	MILES
ID17060209SL016_02	South Fork Race Creek - source to mouth	8.3	MILES
ID17060209SL018_02	Grave Creek - source to mouth	4.87	MILES
ID17060209SL019_02	Salmon River - river mile 106 (T24N, R04E, Sec. 18) to Littl	43.55	MILES
ID17060209SL019_07	Salmon River - river mile 106 (T24N, R04E, Sec. 18) to Littl	19.28	MILES
ID17060209SL020_02	Lake Creek - source to mouth	17.17	MILES
ID17060209SL020_03	Lake Creek - source to mouth	6.2	MILES
ID17060209SL021_01L	Upper Twin Lakes	9.8	ACRES
ID17060209SL021_02	Partridge Creek - source to mouth	27.88	MILES
ID17060209SL021_03	Partridge Creek - source to mouth	8.19	MILES
ID17060209SL021_0L	Paradise Lake	6.26	ACRES
ID17060209SL022_02	Elkhorn Creek - source to mouth	26.65	MILES
ID17060209SL022_02L	Lava Butte Lakes	11.94	ACRES
ID17060209SL023_02	French Creek - Little French Creek to mouth	26	MILES

ID17060209SL023_03	French Creek - Little French Creek to mouth	12.43	MILES
ID17060209SL024_01L	French Creek - Mac Han Lakes	13.52	ACRES
ID17060209SL024_02	Little French Creek - source to mouth	27.7	MILES
ID17060209SL024_02L	Scribner Lake	11.54	ACRES
ID17060209SL025_02	French Creek - source to Little French Creek	26.21	MILES
ID17060209SL025_03	French Creek - source to Little French Creek	2.79	MILES
ID17060209SL027_02	Van Creek - source to mouth	4.66	MILES
ID17060209SL028_02	Allison Creek - West Fork Allison Creek to mouth	2.83	MILES
ID17060209SL030_02	West Fork Allison Creek - source to mouth	10.72	MILES
ID17060209SL031_02	Berg Creek - source to mouth	7.19	MILES
ID17060209SL032_02	Fiddle Creek - source to mouth	12.32	MILES
ID17060209SL033_02	John Day Creek - source to mouth	25.07	MILES
ID17060209SL033_03	John Day Creek - source to mouth	4.01	MILES
ID17060209SL034_02	Slate Creek - from and including Hurley Creek to mouth	12.54	MILES
ID17060209SL036_02	Slate Creek - Little Slate Creek to Hurley Creek	22.51	MILES
ID17060209SL038_02	Deadhorse Creek - source to mouth	8.36	MILES
ID17060209SL041_02L	Slate Lakes	9.73	ACRES
ID17060209SL043_02	McKinzie Creek - source to mouth	16.08	MILES
ID17060209SL045_03	South Fork Skookumchuck Creek - source to mouth	3.21	MILES
ID17060209SL046_02	North Fork Skookumchuck Creek - source to mouth	21.3	MILES
ID17060209SL047_02	Whitebird Creek - confluence of N&SF Whitebird Cr to mouth	46.23	MILES
ID17060209SL047_03	Whitebird Creek - confluence of North and South Fork Whitebi	1.93	MILES
ID17060209SL047_04	Whitebird Creek - confluence of North and South Fork Whitebi	5.74	MILES
ID17060209SL048_02	South Fork Whitebird Creek - Little Whitebird Creek to mouth	3.92	MILES
ID17060209SL050_02	South Fork Whitebird Creek - source to Little Whitebird Cree	9.28	MILES
ID17060209SL050_03	South Fork Whitebird Creek - source to Little Whitebird Cree	6.63	MILES
ID17060209SL052_02	Asbestos Creek - source to mouth	2.86	MILES
ID17060209SL053_02	Teepee Creek - source to mouth	4.75	MILES
ID17060209SL055_02	North Fork Whitebird Creek - source to mouth	33.12	MILES
ID17060209SL056_02	Rock Creek - tributaries	8.39	MILES
ID17060209SL059_02	Telcher Creek - source to mouth	17.29	MILES
ID17060209SL063_02	Eagle Creek - source to mouth	29.92	MILES
ID17060209SL065_02	Wapshilla Creek - source to mouth	11.85	MILES
ID17060209SL065_03	Wapshilla Creek - source to mouth	1.05	MILES

17060210 Little Salmon

ID17060210SL002_0L	Black Lake	25.82	ACRES
ID17060210SL003_02L	Hanson, Lower Cannon, Dog, Slide Rock and Horse Heaven L	41.84	ACRES
ID17060210SL004_02	Paradise Creek - entire drainage	6.85	MILES

ID17060210SL010_02L	Fish Lake	12.32	ACRES
ID17060210SL012L_0L	Goose Lake	365.71	ACRES
ID17060210SL014_01L	Hazard Lakes	205.36	ACRES
ID17060210SL014_02L	Hazard Lakes	244.4	ACRES

Southwest

17050101 C. J. Strike Reservoir

ID17050101SW001_01L	Bruneau Duck Ponds	15.26	ACRES
ID17050101SW001_02L	Flying H Canal Diversion Pond	20.88	ACRES
ID17050101SW001_03	Dry Creek - 3rd order	6.21	MILES
ID17050101SW005_02	Snake River - 1st and 2nd order tribs near Glenns Ferry	16.67	MILES
ID17050101SW007_02	Pot Hole Creek - 1st and 2nd order	102.24	MILES
ID17050101SW007_03	Pot Hole Creek - 3rd order	21.24	MILES
ID17050101SW009_02	Rosevear Gulch - 1st and 2nd order	63.1	MILES
ID17050101SW009_03	Rosevear Gulch - 3rd order	11.08	MILES
ID17050101SW010_02	King Hill Creek - 1st and 2nd order	46.16	MILES
ID17050101SW012_01L	Morrow Reservoir	47.76	ACRES
ID17050101SW012_03L	Trail Diversion Dam	10.19	ACRES
ID17050101SW013_02L	Blair Trail Reservoir	146.53	ACRES
ID17050101SW017_02	Hot Springs Creek - 1st and 2nd order above reservoir	18.43	MILES
ID17050101SW017L_0L	Hot Springs Creek Reservoirs	275.2	ACRES
ID17050101SW019_02	Rattlesnake Creek below Mountain Home Reservoir	39.07	MILES
ID17050101SW019_02L	Rattlesnake Springs Ponds	43.58	ACRES
ID17050101SW020_01L	John Hoffman Reservoir	7.19	ACRES
ID17050101SW020_02	Rattlesnake Creek above Mountain Home Reservoir	29.07	MILES
ID17050101SW020L_0L	Mountain Home Reservoir	405.25	ACRES
ID17050101SW021_02	Canyon Creek - 1st and 2nd order tribs below Fraiser Res.	10.55	MILES
ID17050101SW021_04	Canyon Creek - 4th order (Fraiser Reservoir to Squaw Creek)	6.5	MILES
ID17050101SW021_05	Canyon Creek - 5th order (Squaw Creek to CJ Strike)	10.7	MILES
ID17050101SW022_04	Fraiser Reservoir	2.93	MILES
ID17050101SW023_02	Canyon Creek - 1st and 2nd order above Fraiser Reservoir	44.34	MILES
ID17050101SW023_04	Canyon Creek - 4th order (Syrup Creek to Fraiser Reservoir)	21.43	MILES
ID17050101SW023_05	West Side Canal (half mile segment)	0.55	MILES
ID17050101SW024_02	Long Tom Creek - 1st and 2nd order	37.87	MILES
ID17050101SW024_03L	Long Tom Reservoir	156.44	ACRES
ID17050101SW025_02	Syrup Creek and tributaries - 1st and 2nd order	32.35	MILES
ID17050101SW026_02	Squaw Creek - 1st and 2nd order	77.79	MILES
ID17050101SW026_03	Squaw and Mud Springs Creeks - 3rd order	10.9	MILES

ID17050101SW026_04	Squaw Creek - 4th order (Mud Springs to Canyon Creek)	17.22	MILES

17050102 Bruneau

ID17050102SW001_02	Wilkins Gulch and unnamed tributaries to CJ Strike Reservoir	6.87	MILES
ID17050102SW002_02	Deadman Gulch and Black Rocks - 1st and 2nd order	172.85	MILES
ID17050102SW002_02L	Unnamed Pond near Black Rocks	5.13	ACRES
ID17050102SW002_03	Deadman Gulch and Black Rocks - 3rd order	11.57	MILES
ID17050102SW002_04	Deadman Gulch and Black Rocks - 4th order	8.26	MILES
ID17050102SW003_01L	Unnamed Intermittent Lake in Little Jacks Creek Basin	5.23	ACRES
ID17050102SW003_02	Little Jacks Creek - 1st and 2nd order	142.32	MILES
ID17050102SW003_03	Little Jacks Creek and O X Prong - 3rd order	10.39	MILES
ID17050102SW004_02	Big Jacks Creek - 1st and 2nd order	214.02	MILES
ID17050102SW004_03	Big Jacks Creek -3rd order	21.58	MILES
ID17050102SW004_03L	Jacks Creek Reservoir	19.84	ACRES
ID17050102SW005_02	Cottonwood Creek - entire drainage	20.07	MILES
ID17050102SW008_02	Sugar Creek - 1st and 2nd order tributaries	122.13	MILES
ID17050102SW008_03	Sugar Creek - 3rd order	21.35	MILES
ID17050102SW008_04a	Sugar Creek - 4th order	9.27	MILES
ID17050102SW009_02	Loveridge and Seventyone Gulches - 1st and 2nd order	58.91	MILES
ID17050102SW009_03	Seventyone Gulch - 3rd order	0.54	MILES
ID17050102SW010_03L	Broken Wagon Flat Reservoir	8.65	ACRES
ID17050102SW011_02	Bruneau River (Hot Cr. to Clover Cr.) - 1st and 2nd order	97.62	MILES
ID17050102SW011_02L	White Lake	9.81	ACRES
ID17050102SW011_03	Big Draw	13.6	MILES
ID17050102SW012_02	Miller Water - 1st and 2nd order	81.39	MILES
ID17050102SW012_03	Miller Water - 3rd order	2.44	MILES
ID17050102SW012_04	Miller Water - 4th order	11.4	MILES
ID17050102SW013_02	Bruneau River - 1st and 2nd order	69.64	MILES
ID17050102SW014_02	Sheep Creek - 1st and 2nd order	112.65	MILES
ID17050102SW015_02	Louse and Crab Creeks - 1st and 2nd order	100.09	MILES
ID17050102SW015_03L	Blackstone Reservoir	34.27	ACRES
ID17050102SW016_01L	Otter Reservoir	87.3	ACRES
ID17050102SW016_02a	Buckhorn Reservoir	113.5	ACRES
ID17050102SW016_02L	Rattlesnake Reservoir	6.65	ACRES
ID17050102SW016_03	Marys Creek - 3rd order	12.76	MILES
ID17050102SW018_03	Pole Creek - 3rd order	4.17	MILES
ID17050102SW019_03	Cat Creek - 3rd order	7.07	MILES
ID17050102SW020_02	Bruneau River - 1st and 2nd order above Jarbidge River	94.47	MILES
ID17050102SW020_03	Deep Creek and Triplet Canyon - 3rd order	5.23	MILES

ID17050102SW023_03	Dorsey Creek - 3rd order	4.87	MILES
ID17050102SW024_02	East Fork Jarbidge River - 1st and 2nd order tributaries	3.18	MILES
ID17050102SW026_02	Unnamed draw in Inside Desert - 1st and 2nd order	101.4	MILES
ID17050102SW026_03	Unnamed draw in Inside Desert - 3rd order	14.73	MILES
ID17050102SW027_02	Sheepshead Draw - 2nd order	9.23	MILES
ID17050102SW027_03	Sheepshead Draw - 3rd order	2.63	MILES
ID17050102SW028_02	Clover Creek (East Fork Bruneau River) - 1st and 2nd order	88.6	MILES
ID17050102SW028_03	Clover Creek (East Fork Bruneau River) - 3rd order	2.47	MILES
ID17050102SW029_02	Juniper Draw - 1st and 2nd order	78.21	MILES
ID17050102SW029_03	Juniper Draw - 3rd order	3.9	MILES
ID17050102SW035_02	Buck Flat Draw - 1st and 2nd order	89.47	MILES
ID17050102SW035_03	Buck Flat Draw - 3rd order	14.93	MILES

17050103 Middle Snake-Succor

ID17050103SW001_02	Snake River - 1st and 2nd order	8.48	MILES
ID17050103SW002_02	Succor Creek - 1st and 2nd order	22.54	MILES
ID17050103SW002_02L	Unnamed Lake in Strode Basin	2.4	ACRES
ID17050103SW003_02L	Johnston Lakes	4.27	ACRES
ID17050103SW003_03L	Succor Creek Reservoir	180.43	ACRES
ID17050103SW005_02L	Unnamed Lake on Pole Creek Top	5.37	ACRES
ID17050103SW006_03L	Pacific Land Company Dam	15.99	ACRES
ID17050103SW010_02	West Rabbit Creek - 1st and 2nd order	30.61	MILES
ID17050103SW010_03	West Rabbit Creek - 3rd order	5.79	MILES
ID17050103SW011_02	Rabbit Creek - 1st and 2nd order	117.53	MILES
ID17050103SW011_03	Rabbit Creek - 3rd order	7.65	MILES
ID17050103SW011_04	Rabbit Creek - 4th order	7.9	MILES
ID17050103SW012_02	Sinker Creek - 1st and 2nd order rangeland tributaries	63.66	MILES
ID17050103SW012_02a	Sinker Creek - 1st and 2nd order forested tributaries	36.6	MILES
ID17050103SW012_04L	Hulet-Sinker Creek Reservoir	56.5	ACRES
ID17050103SW013_02	Fossil Creek - 1st and 2nd order	65.22	MILES
ID17050103SW013_03	Fossil Creek - 3rd order	10.13	MILES
ID17050103SW014_02L	Foremans Reservoir	29.7	ACRES
ID17050103SW015_02	Unnamed stream near Oreana	6.57	MILES
ID17050103SW015_05	Catherine Creek - 5th order (Browns Creek to Castle Creek)	5.72	MILES
ID17050103SW017_02	Bates Creek - 1st and 2nd order	19.07	MILES
ID17050103SW017_03	Bates Creek - 3rd order	1.74	MILES
ID17050103SW018_02	Hart and Little Hart Creeks - 1st and 2nd order	46.19	MILES
ID17050103SW018_03	Hart Creek - 3rd order	5.15	MILES
ID17050103SW022_02	McKeeth Wash - 1st and 2nd order	44.08	MILES

ID17050103SW022_03	McKeeth Wash - 3rd order	10.08	MILES
ID17050103SW023_02	Vinson Wash - 1st and 2nd order	60.73	MILES
ID17050103SW024_02	Shoofly & Poison Creeks - 1st and 2nd order	130.12	MILES
ID17050103SW025_03	Corder Creek - 3rd order	9.07	MILES

17050104 Upper Owyhee

ID17050104SW001_02	Owyhee River - 1st and 2nd order	115.68	MILES
ID17050104SW001_03	Owyhee River - 3rd order tributaries	8.85	MILES
ID17050104SW002_02	Unnamed streams in YP Desert	13.79	MILES
ID17050104SW003_02	Piute Creek - 1st and 2nd order	102.32	MILES
ID17050104SW003_03	Piute Creek - 3rd order	8.79	MILES
ID17050104SW003_04	Piute Creek - 4th order	6.35	MILES
ID17050104SW003_04L	Piute Basin Reservoir	8.4	ACRES
ID17050104SW004_02	Juniper Creek - 1st and 2nd order	59.69	MILES
ID17050104SW004_02L	Little Juniper Basin Reservoir	3.91	ACRES
ID17050104SW004_03	Juniper Creek - 3rd order	4.53	MILES
ID17050104SW004_04	Juniper Creek - 4th order	9.37	MILES
ID17050104SW005_02	Juniper Creek - 1st and 2nd order	35.94	MILES
ID17050104SW005_03	Juniper Creek - 3rd order	5.25	MILES
ID17050104SW006_01L	Unnamed Lake in Duck Valley Indian Reservation	45.35	ACRES
ID17050104SW006_02	Thacker and Ross Sloughs - 1st and 2nd order	110.36	MILES
ID17050104SW006_02L	Mud Flat	121.03	ACRES
ID17050104SW006_03	Ross Slough - 3rd order	2.29	MILES
ID17050104SW006_05	Owyhee River - 5th order (above Blue Creek)	1.54	MILES
ID17050104SW006_06	Owyhee River - Blue Creek to Juniper Creek	38.62	MILES
ID17050104SW007_02	Blue Creek: 1st and 2nd order tribs above Blue Cr. Reservoir	49.56	MILES
ID17050104SW007_02L	Unnamed lakes in Duck Valley Indian Reservation	77.28	ACRES
ID17050104SW007_03	Blue Creek - Blue Creek Reservoir to Little Blue Creek	5.77	MILES
ID17050104SW007_04	Blue Creek - Little Blue Creek to Shoofly Creek	10.63	MILES
ID17050104SW007_05	Blue Creek - Shoofly Creek to Owyhee River	25.03	MILES
ID17050104SW008_02	Boyle Creek - 1st and 2nd order	3.45	MILES
ID17050104SW008_02L	Boyle Creek Reservoir	12.71	ACRES
ID17050104SW008_03	Boyle Creek - 3rd order	2.49	MILES
ID17050104SW008L_0L	Mountain View Lake	417.34	ACRES
ID17050104SW009_02	Damon Trail, Mud, Papoose, Bell and Miller Creeks	39.78	MILES
ID17050104SW009_03	Dry Creek - 3rd order	5.68	MILES
ID17050104SW010_02	Payne Creek - 1st and 2nd order	41.65	MILES
ID17050104SW010_02L	Payne Creek Reservoir	74.27	ACRES
ID17050104SW010_03	Payne Creek - 3rd order	11.24	MILES

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ID17050104SW010_04	Payne Creek - 4th order	0.71	MILES
ID17050104SW011_02	Squaw Creek - 1st and 2nd order	57.53	MILES
ID17050104SW011_02L	Squaw Creek Reservoir	41.63	ACRES
ID17050104SW011_03	Squaw Creek - 3rd order	1.45	MILES
ID17050104SW011_0L	Indian Creek Reservoir	18.49	ACRES
ID17050104SW012_02	Little Blue Creek - 1st and 2nd order	49.95	MILES
ID17050104SW012_02L	Sewell Reservoir	5.6	ACRES
ID17050104SW012_03L	Little Blue Creek Reservoir	139.9	ACRES
ID17050104SW013_02	Blue Creek - 1st and 2nd order above Blue Creek Reservoir	80.2	MILES
ID17050104SW013_02L	Unnamed lake on Turner Table	101.97	ACRES
ID17050104SW014_03L	Bybee Reservoir	68.16	ACRES
ID17050104SW014_05	Shoofly Creek ditch - half mile section	0.21	MILES
ID17050104SW015_02	Harris Creek - 1st and 2nd order	46.35	MILES
ID17050104SW015_03	Harris Creek - 3rd order	9.03	MILES
ID17050104SW015_03L	Unnamed Reservoir on Harris Creek	36.3	ACRES
ID17050104SW016_02	Unnamed tributary to Little Jarvis Lake	2.14	MILES
ID17050104SW016_02L	Little Jarvis Lake	281.69	ACRES
ID17050104SW017_02	Little Rough Lake Creek	1.6	MILES
ID17050104SW017_02L	Rough Lake	331.11	ACRES
ID17050104SW018_02	Unnamed tributary to Ross Lake	1.61	MILES
ID17050104SW018_02L	Ross Lake	1000.77	ACRES
ID17050104SW019_02L	Juniper Lake	387.95	ACRES
ID17050104SW020_02L	Henry Lake	170.5	ACRES
ID17050104SW021_02	Unnamed tributary to Owyhee River near Ross Lake	17.34	MILES
ID17050104SW021_02L	Unnamed Lake in Duck Valley Indian Reservation	31.02	ACRES
ID17050104SW022_02	Yatahoney Creek - 1st and 2nd order	44.23	MILES
ID17050104SW022_03	Yatahoney Creek - 3rd order	7.22	MILES
ID17050104SW023_01L	Unnamed Pond near Hutch Springs	7.23	ACRES
ID17050104SW023_02L	Battle Creek Spring Pond	13.49	ACRES
ID17050104SW023_03L	Battle Creek Reservoir	8.47	ACRES
ID17050104SW024_02L	Dry Creek Reservoir	72.57	ACRES
ID17050104SW026_01L	Bennett Reservoir	4.62	ACRES
ID17050104SW026_02a	Deep Creek - 1st and 2nd order forested tributaries	80.26	MILES
ID17050104SW026_02L	Hackberry Reservoir	15.48	ACRES
ID17050104SW026_03	Deep Creek - 3rd order rangeland tributaries	12.93	MILES
ID17050104SW027_02	Dickshooter Creek - 1st and 2nd order	107.68	MILES
ID17050104SW027_03	Dickshooter Creek - 3rd order	6.27	MILES
ID17050104SW027_05	Dickshooter Creek - 5th order	14.43	MILES

ID17050104SW028_02L	Johnson Reservoir	5.63	ACRES
ID17050104SW029_02	Camas Creek - 1st and 2nd order	40.16	MILES
ID17050104SW030_03	Camel Creek - 3rd order	2.12	MILES
ID17050104SW031_02L	Unnamed Reservoir on Wilson Creek	2.18	ACRES
ID17050104SW031_04	Nickel Creek - 4th order	8.21	MILES
ID17050104SW032_02L	Star Reservoir	38.73	ACRES
ID17050104SW032_03L	Unnamed Reservoir near Castro Ranch	4.97	ACRES

17050105 South Fork Owyhee

ID17050105SW001_02	Unnamed 1st and 2nd order tributaries to SF Owyhee River	127.7	MILES
ID17050105SW002_02	Spring Creek - 1st and 2nd order	46.56	MILES
ID17050105SW002_03	Spring Creek - 3rd order	6.12	MILES
ID17050105SW003_02	Bull Camp Reservoir - 1st and 2nd order	16.33	MILES
ID17050105SW003_03	Bull Camp Reservoir - 3rd order	1.62	MILES
ID17050105SW003_04	Bull Camp Reservoir - 4th order	4.61	MILES
ID17050105SW004_02	Homer Wells Reservoir - 1st and 2nd order	86.01	MILES
ID17050105SW004_03	Homer Wells Reservoir - 3rd order	12.43	MILES
ID17050105SW004_03L	Horse Basin Reservoirs and Homer Wells Reservoir	12.84	ACRES
ID17050105SW004_04	Homer Wells Reservoir - 4th order	6.33	MILES
ID17050105SW004_04L	Homer Wells Reservoir	35.85	ACRES
ID17050105SW005_02	Coyote Flat - 1st and 2nd order	30.33	MILES
ID17050105SW005_03	Coyote Flat - 3rd order	4.72	MILES

17050106 East Little Owyhee

ID17050106SW001_02	Little Owyhee River - 1st and 2nd order	77.29	MILES
ID17050106SW001_03	Little Owyhee River - 3rd order	16.5	MILES
ID17050106SW002_02	Tent Creek- 1st and 2nd order	33.62	MILES
ID17050106SW002_03	Tent Creek- 3rd order	7.54	MILES
ID17050106SW002_04	Tent Creek- 4th order	4.54	MILES
ID17050106SW002_04L	Tent Creek Reservoir	21.05	ACRES

17050107 Middle Owyhee

ID17050107SW001_02	Dukes Creek and Bald Mountain Canyon - 1st and 2nd order	34.8	MILES
ID17050107SW001_07	Owyhee River - South Fork Owyhee River to ID/OR border	9.18	MILES
ID17050107SW002_02	Oregon Lake Creek - 1st and 2nd order	7.39	MILES
ID17050107SW003_02	Field Creek - 1st and 2nd order	11.12	MILES
ID17050107SW005_02	Pole Creek - 1st and 2nd order	17.87	MILES
ID17050107SW007_02	Cottonwood Creek - 1st and 2nd order	22.34	MILES
ID17050107SW013_02	Cherry Creek - 1st and 2nd order	52.07	MILES
ID17050107SW013_03	Cherry Creek - 3rd order	3.84	MILES

ID17050107SW014_02	Soldier, Stove and Sheep Creeks - 1st and 2nd order	30.17	MILES

17050108 Jordan

ID17050108SW001_02	Lower Jordan Creek - 1st and 2nd order tributaries	34.37	MILES
ID17050108SW002_02L	Unnamed Reservoir on Lone Tree Creek	6.72	ACRES
ID17050108SW002_03	Lone Tree Creek - 3rd order	6.08	MILES
ID17050108SW003_03	Williams Creek - 3rd order (Pole Bridge Creek to mouth)	2.23	MILES
ID17050108SW004_02L	Pershall Reservoir	9.8	ACRES
ID17050108SW005_02	Old Man, Coyote, Howl and parts of South Mountain Creeks	44.56	MILES
ID17050108SW006_02	South Boulder, Indian and Bogus Creeks - 1st and 2nd order	53.63	MILES
ID17050108SW006_04	South Boulder Creek - 4th order (Indian Creek to mouth)	3.11	MILES
ID17050108SW007_02	North Boulder Creek - 1st and 2nd order	30.12	MILES
ID17050108SW007_03	North Boulder Creek - 3rd order (Mammoth Creek to mouth)	2.31	MILES
ID17050108SW007_05	Big Boulder Creek (North Boulder to South Boulder Creeks)	3.86	MILES
ID17050108SW008_02	Mammoth Creek - entire drainage	12.8	MILES
ID17050108SW009_02	Combination Creek - entire drainage	12.33	MILES
ID17050108SW010_02	Triangle Creek and unnamed tributaries to Rock Creek	28.67	MILES
ID17050108SW010_05	Rock Creek -Triangle Reservoir Dam to mouth	5.16	MILES
ID17050108SW011_02	Rose Creek - entire drainage	13.61	MILES
ID17050108SW012_02	Josephine and Wickiup Creeks - 1st and 2nd order	45.44	MILES
ID17050108SW012_03	Josephine and Wickiup Creeks - 3rd order	4.79	MILES
ID17050108SW013_03L	Triangle Reservoir	82.94	ACRES
ID17050108SW015_02L	Unnamed Reservoir near Meadow Creek	125.72	ACRES
ID17050108SW015_03L	Spencer Reservoir	28.8	ACRES
ID17050108SW016_02	Deer Creek - entire drainage	13.66	MILES
ID17050108SW019_02	Trout Creek - 1st and 2nd order	33.78	MILES
ID17050108SW019_03	Trout Creek - 3rd order	7.03	MILES
ID17050108SW020_02	Hooker Creek - entire drainage	7.11	MILES
ID17050108SW023_02	Baxter Creek - 1st and 2nd order	6.94	MILES

17050111 North And Middle Fork Boise

ID17050111SW002_02L	Roaring River Lakes	17	ACRES

17050112 Boise-Mores

ID17050112SW001_02	Sheep, Charcoal, Birch, Macks and Deer Creeks	39.93	MILES
ID17050112SW002_02	1st and 2nd order tributaries to Arrowrock Reservoir	35.24	MILES
ID17050112SW005_02	Sheep Creek - 1st and 2nd order	41.58	MILES
ID17050112SW008_02	Deer Creek - entire drainage	5.52	MILES
ID17050112SW010_02	Smith Creek - entire drainage	9.86	MILES

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17050113 South Fork Boise

ID17050113SW001_02	Arrowrock Reservoir (1st and 2nd order tributaries)	17.01	MILES
ID17050113SW002a_02	Willow Creek and tributaries - 1st and 2nd order	31.94	MILES
ID17050113SW002a_03	Willow Creek - 3rd order above Cottonwood Creek	5.28	MILES
ID17050113SW002b_02	Willow Creek - 1st and 2nd order	29.27	MILES
ID17050113SW006_02	Little Camas Creek - unnamed tributary near aqueduct	3.77	MILES
ID17050113SW006_04	Little Camas Creek - Little Camas Reservoir to mouth	1.96	MILES
ID17050113SW007_02	Cat Creek - 1st and 2nd order	23.79	MILES
ID17050113SW007_03	Cat Creek - 3rd order (Buck Creek to mouth)	3.1	MILES
ID17050113SW008_02	Little Camas Creek - 1st and 2nd order above Reservoir	25.78	MILES
ID17050113SW008_03	Little Camas Creek - 3rd order above Little Camas Reservoir	4.31	MILES
ID17050113SW009_02	Wood and Little Wood Creeks - 1st and 2nd order	17.06	MILES
ID17050113SW009_03	Wood Creek - 3rd order	0.41	MILES
ID17050113SW010_02a	Moores Creek - 1st and 2nd order	45.19	MILES
ID17050113SW015_05	South Fork Boise River - 5th order	16.31	MILES
ID17050113SW017_02	Boardman Creek - 1st and 2nd order	19.75	MILES
ID17050113SW022_02	Johnson Creek - 1st and 2nd order	18.09	MILES
ID17050113SW028_02L	Big Trinity Lake	25.5	ACRES

17050114 Lower Boise

ID17050114SW003_02L	Unnamed Reservoirs on Caldwell Draw	4.96	ACRES
ID17050114SW003_03L	Indian Creek Reservoir	126.28	ACRES
ID17050114SW005_02	Mill Slough and Phyllis Slough	16.83	MILES
ID17050114SW007_02	Unnamed 1st order tributary to Fifteenmile Creek	1.25	MILES
ID17050114SW008_02	Tenmile Creek - 1st and 2nd order	37.4	MILES
ID17050114SW009_03L	Blacks Creek Reservoir	82.5	ACRES
ID17050114SW010_03L	Unnamed Ponds on Fivemile Creek	5.73	ACRES
ID17050114SW011a_02	Warm Springs and Squaw Creeks, and Maynard Gulch	19.51	MILES
ID17050114SW011a_02	Warm Springs Golf Course Lake	4.33	ACRES
ID17050114SW011b_02	Lydle Gulch and two nearby unnamed intermittent streams	7.27	MILES
ID17050114SW013_02	Dry Creek - 1st and 2nd order	69.15	MILES
ID17050114SW013_04	Dry Creek - 4th order (Spring Valley Creek to mouth)	4.9	MILES
ID17050114SW014_02	Big Gulch and Little Gulch Creeks, and Woods Gulch	36.18	MILES
ID17050114SW016_02	Tributaries to West Hartley Gulch and Sand Hollow Creek	56.55	MILES
ID17050114SW017_02	Sand Hollow Creek - 1st and 2nd order tributaries	33.36	MILES

17050115 Middle Snake-payette

ID17050115SW001_02	Cherry Gulch and Buttermilk Slough	34.36	MILES
ID17050115SW001_06	Sand Hollow Creek - 1 mile segment at the mouth	1.25	MILES

ID17050115SW002_02	Homestead Gulch	20.26	MILES
ID17050115SW002_08	Snake River side channels near Homestead Gulch	0.47	MILES
ID17050115SW003_02	Ashlock Gulch - 1st and 2nd order	13.18	MILES
ID17050115SW003_03	Ashlock Gulch - 3rd order	1.94	MILES
ID17050115SW004_02	Hurd and Big Whitley Gulches	23.39	MILES
ID17050115SW005_02	Sand Hollow	24.21	MILES

17050120 South Fork Payette

ID17050120SW010_02L	Bull Trout Lakes	72.99	ACRES
ID17050120SW014_04	Deadwood River - Deadwood Reservoir Dam to mouth	23.03	MILES

17050121 Middle Fork Payette

ID17050121SW003_02	Lightning Creek - 1st and 2nd order	23.17	MILES

17050122 Payette

ID17050122SW001_02	Graveyard and Langley Gulches, and Haw Creek	192.47	MILES
ID17050122SW001_02L	Unnamed Pond between Langley and Graveyard Gulches	4.06	ACRES
ID17050122SW003_02	Payette River - 1st and 2nd order rangeland tributaries	89.85	MILES
ID17050122SW003_03	Fleming Creek - 3rd order	2.09	MILES
ID17050122SW004_02	Shafer Creek - 1st and 2nd order	76.5	MILES
ID17050122SW006_02	Porter Creek - 1st and 2nd order	19.67	MILES
ID17050122SW006_03	Porter Creek - 3rd order (Shanks Creek to mouth)	4.72	MILES
ID17050122SW007_02	Hill Creek - 1st and 2nd order	25.34	MILES
ID17050122SW007_03	Hill Creek - 3rd order	3.1	MILES
ID17050122SW008_02	Eddy Creek and unnamed tributaries to SF Payette River	12.22	MILES
ID17050122SW008_05	Payette River - Middle Fork to North Fork	7.59	MILES
ID17050122SW009_02	Deer Creek - entire drainage	20.42	MILES
ID17050122SW011_01L	Beal Reservoir Number 3	13.82	ACRES
ID17050122SW011_02L	Unnamed reservoir on Padget Creek	25.24	ACRES
ID17050122SW014_02L	Sage Hen Reservoir	176.79	ACRES
ID17050122SW015_02L	Little Lake	58.36	ACRES
ID17050122SW016_02	Sand Hollow - 1st and 2nd order	23.3	MILES
ID17050122SW016_03	Sand Hollow - 3rd order	2.73	MILES
ID17050122SW017_02L	Unnamed Pond in Stone Quarry Gulch	4.69	ACRES
ID17050122SW018_02	Little Willow Creek below Paddock Valley - 1st and 2nd order	86.98	MILES
ID17050122SW019_02	Indian, Hog Cove and Rattlesnake Creeks - 1st and 2nd order	19.37	MILES
ID17050122SW019_03	Indian Creek - 3rd order (Rattlesnake to Little Willow)	3.32	MILES
ID17050122SW020_02	Two unnamed tributaries to Paddock Valley Reservoir	7.7	MILES
ID17050122SW021_02	Little Willow Creek above Paddock - 1st and 2nd order	28.25	MILES
ID17050122SW021_03	Little Willow Creek above Paddock Valley Res. - 3rd order	4.12	MILES

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17050123 North Fork Payette

ID17050123SW001_02L	Blue Lake	12.98	ACRES
ID17050123SW003_01L	East Mountain Reservoir	18.33	ACRES
ID17050123SW003_02L	Herrick Reservoir	39.7	ACRES
ID17050123SW004_02L	Corral Creek Reservoir	40.29	ACRES
ID17050123SW004_03L	Warner Pond	17.66	ACRES
ID17050123SW005_02L	Horsethief Reservoir	249.8	ACRES
ID17050123SW006_01L	Calendar Reservoir	58.2	ACRES
ID17050123SW006_02L	Davis Reservoir	30.39	ACRES
ID17050123SW006_0L	Smalley Reservoir	14.73	ACRES
ID17050123SW010_02L	Rapid Creek Lakes	21.79	ACRES
ID17050123SW011_01L	Boulder Meadows Reservoir	30.7	ACRES
ID17050123SW011_02a	Melton Reservoir	8.26	ACRES
ID17050123SW011_02L	Jussila-Bow Lake and unnamed reservoir on Cold Creek	37.86	ACRES
ID17050123SW011_0L	Louie Lake and Upper Jug Creek Reservoir	51.3	ACRES
ID17050123SW014_03L	Browns Pond	83.24	ACRES
ID17050123SW016_02	North Fork Payette River - Payette Lake to Cascade Reservoir	39.32	MILES
ID17050123SW016_02L	Hait Reservoir (Blackhawk Lake)	63.32	ACRES
ID17050123SW017_01L	Unamed Lake between Lemah and Fall Creeks	15.61	ACRES
ID17050123SW018_01L	Pearl Lake	8.83	ACRES
ID17050123SW022_01L	Granite Lake	187.73	ACRES

17050124 Weiser

ID17050124SW001_02	Weiser River - Keithly Creek to mouth	115.45	MILES
ID17050124SW003_02	Camp and Star Butte Creeks - 1st and 2nd order	31.35	MILES
ID17050124SW003_02L	Star Butte Pond	23.18	ACRES
ID17050124SW003_03	Camp Creek - 3rd order	2.38	MILES
ID17050124SW004_02	Milk Creek - entire drainage	24.23	MILES
ID17050124SW005_02L	Soulen Reservoir	117.61	ACRES
ID17050124SW006_01L	Groner Reservoir	12.48	ACRES
ID17050124SW006_02L	Crane Springs Pond	15.97	ACRES
ID17050124SW009_02	Ben Ross Reservoir - all inlet and outlet streams	9.29	MILES
ID17050124SW009_02L	Ben Ross Reservoir	291.57	ACRES
ID17050124SW010_02	Mill Creek - entire drainage	13.97	MILES
ID17050124SW012_02	Grays Creek - 1st and 2nd order	45.71	MILES
ID17050124SW012_03	Grays Creek - 3rd order (Sucker Creek to mouth)	3.76	MILES
ID17050124SW013_02	Bacon Creek - entire drainage	7.96	MILES
ID17050124SW019_02L	Lost Valley Reservoir	521.39	ACRES

ID17050124SW021_03	Hornet and North Fork Hornet Creeks - 3rd order	11.03	MILES
ID17050124SW026_02	Spring and Camp Creeks - 1st and 2nd order	26.53	MILES
ID17050124SW026_03	Spring Creek - 3rd order (Camp Creek to mouth)	1.5	MILES
ID17050124SW029_02	Sage Creek - 1st and 2nd order	40.34	MILES
ID17050124SW029_03	Sage Creek - 3rd order (Fairchild Reservoir outlet to mouth)	6.05	MILES
ID17050124SW030_02	Mann Creek - 1st and 2nd order	24.88	MILES
ID17050124SW031_02	Unnamed tributary to Mann Creek near Fairchild Reservoir	2.9	MILES
ID17050124SW033_02	Monroe Creek - 1st and 2nd order	58.73	MILES
ID17050124SW033_02L	Barton Reservoir	17.48	ACRES

17050201 Brownlee Reservoir

ID17050201SW002_02	Tributaries to Snake River - 1st and 2nd order	16.35	MILES
ID17050201SW002_02a	Salt Creek - entire drainage	4.37	MILES
ID17050201SW004_02	Snake River - Weiser River to Scott Creek	0.22	MILES
ID17050201SW010_02	Rock Creek - 1st and 2nd order	63.01	MILES
ID17050201SW010_03	Rock Creek - 3rd order	7.31	MILES
ID17050201SW011_02	Wolf Creek - 1st and 2nd order	10.57	MILES
ID17050201SW015_02L	Barber Flat Reservoir	4.95	ACRES

Upper Snake

17040104 Palisades

ID17040104SK005_02	Fall Creek - South Fork Fall Creek to mouth	20.53	MILES
ID17040104SK009_02	Indian Creek - source to mouth	9.82	MILES
ID17040104SK010_02	1st & 2nd Order Streams flowing into Palisades Reservoir	54.21	MILES
ID17040104SK010L_0L	Palisades Reservoir	14430.4	ACRES
ID17040104SK011_03	Bear Creek - North Fork Bear Creek to Palisades Reservoir	2.26	MILES
ID17040104SK012_02	North Fork Bear Creek - source to mouth	17.28	MILES
ID17040104SK014_02	McCoy Creek - Fish Creek to Palisades Reservoir	30.36	MILES
ID17040104SK014_03	McCoy Creek - Fish Creek to Palisades Reservoir	1.54	MILES
ID17040104SK015_02	McCoy Creek - Iowa Creek to Fish Creek	20.63	MILES
ID17040104SK016_02	McCoy Creek - Clear Creek to Iowa Creek	20.68	MILES
ID17040104SK016_04	McCoy Creek - Clear Creek to Iowa Creek	2.8	MILES
ID17040104SK017_02	Wolverine Creek - source to mouth	15.52	MILES
ID17040104SK017_03	Wolverine Creek - source to mouth	1.49	MILES
ID17040104SK018_02	Clear Creek - source to mouth	28.93	MILES
ID17040104SK018_03	Clear Creek - source to mouth	3.94	MILES
ID17040104SK020_02	Iowa Creek - source to mouth	18.74	MILES
ID17040104SK021_02	Fish Creek - source to mouth	16.84	MILES

ID17040104SK023_02	Burns Creek - source to Idaho/Wyoming border	8.09	MILES
ID17040104SK024_02	Indian Creek - Idaho/Wyoming border to Palisades Reservoir	6.59	MILES
ID17040104SK025_02	Big Elk Creek - Idaho/Wyoming border to Palisades Reservoir	22.74	MILES
ID17040104SK027_02	Palisades Creek - source to mouth	109.86	MILES
ID17040104SK028_02	Rainey Creek - source to mouth	89.49	MILES
ID17040104SK028_03	Rainey Creek - source to mouth	4.46	MILES
ID17040104SK031_02	Burnt Canyon Creek - source to mouth	21.11	MILES

17040105 Salt

ID17040105SK001_02	Tributaries of Salt River - source to Idaho/Wyoming border (	9.5	MILES
ID17040105SK002_02d	Squaw Creek	16.19	MILES
ID17040105SK002_04	Jackknife Creek - source to Idaho/Wyoming border	4.73	MILES
ID17040105SK005_02	Tributaries of Salt River - source to Idaho/Wyoming border (	25	MILES
ID17040105SK005_05	Tributaries of Salt River - source to Idaho/Wyoming border (	0.29	MILES
ID17040105SK006_02	Stump Creek - source to Idaho/Wyoming border	56.11	MILES
ID17040105SK006_02L	Unnamed Lake - Trib to Stump Creek	4.06	ACRES
ID17040105SK007_02	Tygee Creek - source to mouth	16.23	MILES
ID17040105SK007_02a	Webster Creek	2.48	MILES
ID17040105SK007_02b	Draney Creek	3.41	MILES
ID17040105SK010_02	Deer Creek - source to mouth	2.49	MILES
ID17040105SK011_02	Rock Creek - source to mouth	17.46	MILES
ID17040105SK011_02a	Rock Creek	2.96	MILES
ID17040105SK012_01L	Elk Valley Springs	10.34	ACRES
ID17040105SK012_02	Spring Creek - source to mouth	3.69	MILES
ID17040105SK012_02b	Spring Creek	2.96	MILES

17040201 Idaho Falls

ID17040201SK001_02	Snake River - Dry Bed Creek to river mile 791 (T01N, R37E, S	30.6	MILES
ID17040201SK001_04	Snake River - Dry Bed Creek to river mile 791 (T01N, R37E, S	22.07	MILES
ID17040201SK001_05	Snake River - Dry Bed Creek to river mile 791 (T01N, R37E, S	5.72	MILES
ID17040201SK002_02	South Fork Willow Creek - source to mouth	7.34	MILES
ID17040201SK002_05	South Fork Willow Creek - source to mouth	6.87	MILES
ID17040201SK003_05	North Fork Willow Creek - source to mouth	10.21	MILES
ID17040201SK004_02	Dry Bed Creek - source to mouth	14.3	MILES
ID17040201SK004_06	Dry Bed Creek - source to mouth	41.7	MILES
ID17040201SK005_02	Sand Creek complex	118.05	MILES
ID17040201SK005_03	Sand Creek complex	12.27	MILES
ID17040201SK005_04	Sand Creek complex	3.8	MILES
ID17040201SK006_05	Crow Creek - Willow Creek to mouth	28.29	MILES

ID17040201SK007_02	Crow Creek - source to Willow Creek	37.36	MILES
ID17040201SK009_02	Snake River - Annis Slough to Dry Bed Creek	21.38	MILES
ID17040201SK009_06	Snake River - Annis Slough to Dry Bed Creek	4.32	MILES
ID17040201SK009_07	Snake River - Annis Slough to Dry Bed Creek	24.95	MILES
ID17040201SK010_02	Spring Creek - canal (T05N, R38E) to mouth	5.49	MILES
ID17040201SK011_02	Spring Creek - source to canal (T05N, R38E)	2.83	MILES
ID17040201SK012_02	Snake River - Dry Bed to Annis Slough	53.46	MILES
ID17040201SK012_06	Snake River - Dry Bed to Annis Slough	62.41	MILES
ID17040201SK012_07	Snake River - Dry Bed to Annis Slough	1.5	MILES
ID17040201SK014_02	Lyons Creek - source to mouth	57.95	MILES
ID17040201SK014_03	Lyons Creek - source to mouth	5.23	MILES
ID17040201SK015_02	Unnamed Tributary - source to mouth (T8N, R38E)	14.42	MILES
ID17040201SK015_03	Unnamed Tributary - source to mouth (T8N, R38E)	7.36	MILES
ID17040201SK016_02	Market Lake - 1st and 2nd Order Tribs	0.64	MILES
ID17040201SK016_02L	Market Lake	56.16	ACRES
ID17040201SK017_02	Kettle Butte complex	101.81	MILES

17040202 Upper Henrys

ID17040202SK001_01L	Blue Creek Reservoir - Cherry Dam	4.35	ACRES
ID17040202SK001_02	Henrys Fork - Warm River to Ashton Reservoir Dam	106.13	MILES
ID17040202SK001_02L	Coleman Canyon Lake	4.81	ACRES
ID17040202SK001_03	Henrys Fork - Warm River to Ashton Reservoir Dam	1.15	MILES
ID17040202SK001_06	Henrys Fork - Warm River to Ashton Reservoir Dam	6.4	MILES
ID17040202SK001_06L	Ashton Reservoir (Henrys Fork)	356.32	ACRES
ID17040202SK002_02	Warm River - Warm River Spring to mouth	15.57	MILES
ID17040202SK003_02	Moose Creek - source to confluence with Warm River	10.88	MILES
ID17040202SK004_02	Partridge Creek - source to mouth	45.88	MILES
ID17040202SK004_03	Partridge Creek - source to mouth	6.24	MILES
ID17040202SK006_02	Robinson Creek - Rock Creek to mouth	3.54	MILES
ID17040202SK006_04	Robinson Creek - Rock Creek to mouth	4.41	MILES
ID17040202SK007_02L	Long Meadows Lakes	27.43	ACRES
ID17040202SK008_02	Rock Creek - Wyoming Creek to mouth	10.11	MILES
ID17040202SK009_02	Wyoming Creek - Idaho/Wyoming border to mouth	5.16	MILES
ID17040202SK010_02L	Robinson Lake (Rock Creek)	33.86	ACRES
ID17040202SK011_02	Robinson Creek - Idaho/Wyoming border and sources west of	42.95	MILES
ID17040202SK013_03	Fish Creek - source to mouth	4.02	MILES
ID17040202SK014_02	Henrys Fork - Thurman Creek to Warm River	36.43	MILES
ID17040202SK014_02L	Fish Pond (Henry's Fork)	54.75	ACRES
ID17040202SK015_02	Henrys Fork - Island Park Reservoir Dam to Thurman Creek	16.38	MILES

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ID17040202SK015_05	Henrys Fork - Island Park Reservoir Dam to Thurman Creek	9.66	MILES
ID17040202SK016_03	Buffalo River - Elk Creek to mouth	2.33	MILES
ID17040202SK017_02	Toms Creek - source to mouth	11.74	MILES
ID17040202SK018_02	Buffalo River - source to Elk Creek	17.82	MILES
ID17040202SK018_02a	Chick Creek	15.91	MILES
ID17040202SK018_03	Buffalo River - source to Elk Creek	9.11	MILES
ID17040202SK019_02	Elk Creek - source to mouth	7.49	MILES
ID17040202SK019_02L	Elk Creek Reservoir	20.44	ACRES
ID17040202SK020_01L	Unnamed Lake - Island Park Reservoir	7.24	ACRES
ID17040202SK020_02	1 & 2 Tribs Island Park Reservoir	82.71	MILES
ID17040202SK020_02L	Bishop Lake	17.19	ACRES
ID17040202SK020L_0L	Island Park Reservoir	7670.12	ACRES
ID17040202SK021_05	Henrys Fork - Confluence of Big Springs and Henrys Lake Out	7.89	MILES
ID17040202SK023_02	Big Springs - source to mouth	1.31	MILES
ID17040202SK025_03	Henrys Lake Outlet - Henrys Lake Dam to mouth	2.09	MILES
ID17040202SK026_02	Meadows Creek - source to mouth	5.28	MILES
ID17040202SK027_02	Reas Pass Creek - source to sink	17.25	MILES
ID17040202SK032_02	Henrys Lake 1st and 2nd order Tribs	25.5	MILES
ID17040202SK032L_0L	Henrys Lake	6076.791	ACRES
ID17040202SK034_02L	Edwards and Clark Lakes	25.01	ACRES
ID17040202SK037_02	Rock Creek - source to mouth	10.41	MILES
ID17040202SK037_02L	Lake Marie	3.15	ACRES
ID17040202SK038_02	Hope Creek - source to mouth	4.72	MILES
ID17040202SK039_02	Crooked Creek - source to mouth	17.76	MILES
ID17040202SK039_04	Crooked Creek - source to mouth	12.44	MILES
ID17040202SK043_02	Sheep Creek - source to mouth	24.1	MILES
ID17040202SK043_03	Sheep Creek - source to mouth	1.47	MILES
ID17040202SK043_03L	Sheep Creek Reservoir	20.13	ACRES
ID17040202SK044_02L	Icehouse Creek Reservoirs	83.29	ACRES
ID17040202SK045_02	Sheridan Creek - Kilgore Road (T13N, R41E, Sec. 07) to mout	34.47	MILES
ID17040202SK046_02	Willow Creek - source to mouth	18.74	MILES
ID17040202SK046_03	Willow Creek - source to mouth	2.64	MILES
ID17040202SK047_03	Myers Creek - source to mouth	3.76	MILES
ID17040202SK048_02	Sheridan Creek - source to Kilgore Road (T13N, R41E, Sec. 0	17.71	MILES
ID17040202SK048_02L	Unnamed Lake - West Fork Sheridan Creek	3.88	ACRES
ID17040202SK049_02	Sheridan Reservoir - Tribs order 1 & 2	8.17	MILES
ID17040202SK049L_0L	Sheridan Reservoir	323.71	ACRES
ID17040202SK050_02	Dry Creek - source to Sheridan Reservoir	16.37	MILES

ID17040202SK051_02	Thurman Creek - source to mouth	19.91	MILES
ID17040202SK051_02L	Silver Lake	164.77	ACRES
ID17040202SK051_0L	Golden Lake	35.79	ACRES
ID17040202SK052_02	Rattlesnake Creek - source to mouth	14.34	MILES

17040203 Lower Henrys

ID17040203SK001_02	Henrys Fork - South Fork Teton River to hydrologic unit boun	6.76	MILES
ID17040203SK001_06	Henrys Fork - South Fork Teton River to hydrologic unit boun	26.62	MILES
ID17040203SK002_01L	Unnamed Waterbodies in ID17040203SK002_02	18.69	ACRES
ID17040203SK002_02	Henry's Fork - North Fork Teton River to South Fork Teton Ri	15.65	MILES
ID17040203SK002_02L	Egin Lakes	32.05	ACRES
ID17040203SK002_06	Henry's Fork - North Fork Teton River to South Fork Teton Ri	36.83	MILES
ID17040203SK002_0L	Mackerts Pond	5.51	ACRES
ID17040203SK003_02	Henrys Fork - Falls River to North Fork Teton River	19.93	MILES
ID17040203SK003_02L	Unnamed Lake - Henrys Fork	2.07	ACRES
ID17040203SK003_05	Henrys Fork - Falls River to North Fork Teton River	9.02	MILES
ID17040203SK004_02	Unnamed Tribs to Falls River	38.56	MILES
ID17040203SK004_03	Unnamed Tribs to Falls River	10.98	MILES
ID17040203SK005_02	Falls River - 02 Stream Order and tribs	6.12	MILES
ID17040203SK006_02	Conant Creek - Idaho/Wyoming border to Squirrel Creek	8.63	MILES
ID17040203SK007_02L	Ernest Lake	12.02	ACRES
ID17040203SK008_02	Squirrel Creek - Idaho/Wyoming border to mouth	19.67	MILES
ID17040203SK009_02	Falls River - Idaho/Wyoming border to Boone Creek	17.69	MILES
ID17040203SK009_04	Falls River - Idaho/Wyoming border to Boone Creek	17.22	MILES
ID17040203SK010_03	Boone Creek - Idaho/Wyoming border to mouth	4.87	MILES
ID17040203SK011_02	Boundary Creek - Idaho/Wyoming border (T12N, R46E, Sec. 0	16.72	MILES
ID17040203SK011_03	Boundary Creek - Idaho/Wyoming border (T12N, R46E, Sec. 0	4.06	MILES
ID17040203SK012_02	Henrys Fork - Ashton Reservoir Dam to Falls River	60.56	MILES
ID17040203SK012_02L	Mikesell Reservoirs #1 and #2	31.37	ACRES
ID17040203SK012_06	Henrys Fork - Ashton Reservoir Dam to Falls River	6.51	MILES
ID17040203SK013_04L	Lemon Lake - (Sand Creek)	42.66	ACRES
ID17040203SK014_02	Pine Creek - source to mouth	21.3	MILES
ID17040203SK014_03	Pine Creek - source to mouth	3.39	MILES
ID17040203SK014_03L	Lower Arcadia Reservoir (Pine Creek Source to Mouth)	71.59	ACRES
ID17040203SK015_02	Sand Creek - source to Pine Creek	79.16	MILES
ID17040203SK015_02L	Sand Creek Reservoir	70.28	ACRES
ID17040203SK015_03	Sand Creek - source to Pine Creek	5.64	MILES
ID17040203SK015_03L	Upper Arcadia Reservoir	53.62	ACRES
ID17040203SK015_04L	Blue Creek Reservoir(s) #'S 1, 2, 3	74.38	ACRES

ID17040203SK016_06	Warm Slough - source to mouth	8.59	MILES

17040204 Teton

ID17040204SK001_02	South Fork Teton River - Teton River Forks to Henrys Fork	41.04	MILES
ID17040204SK001_03	South Fork Teton River - Teton River Forks to Henrys Fork	4.77	MILES
ID17040204SK002_02	North Fork Teton River - Teton River Forks to Henrys Fork	13.53	MILES
ID17040204SK003_02	Teton River - Teton Dam to Teton River Forks	14.79	MILES
ID17040204SK004_02	Teton River - Canyon Creek to Teton Dam	10.27	MILES
ID17040204SK004_05	Teton River - Canyon Creek to Teton Dam	5.52	MILES
ID17040204SK005_02	Moody Creek - confluence of North and South Fork Moody Cre	106.42	MILES
ID17040204SK006_03	South Fork Moody Creek - source to mouth	0.74	MILES
ID17040204SK007_03	North Fork Moody Creek - source to mouth	1.25	MILES
ID17040204SK009_02	Canyon Creek - source to Warm Creek	57.43	MILES
ID17040204SK009_04	Canyon Creek - source to Warm Creek	0.36	MILES
ID17040204SK010_02	Calamity Creek - source to mouth	19.64	MILES
ID17040204SK012_02	Teton River - Milk Creek to Canyon Creek	17.48	MILES
ID17040204SK012_05	Teton River - Milk Creek to Canyon Creek	5.03	MILES
ID17040204SK013_03	Milk Creek - source to mouth	7.1	MILES
ID17040204SK014_02	Teton River - Felt Dam outlet to Milk Creek	22.42	MILES
ID17040204SK014_05	Teton River - Felt Dam outlet to Milk Creek	7.64	MILES
ID17040204SK015_02	Teton River - Felt Dam pool	7.22	MILES
ID17040204SK016_02	Teton River - Highway 33 bridge to Felt Dam pool	12.11	MILES
ID17040204SK017_02	Teton River - Cache Bridge (NW ¼, NE ¼, Sec. 1, T5N, R44E	31.91	MILES
ID17040204SK017_03	Teton River - Cache Bridge (NW ¼, NE ¼, Sec. 1, T5N, R44E	5.37	MILES
ID17040204SK019_02L	Packsaddle Lake	5	ACRES
ID17040204SK020_02	Teton River - Teton Creek to Cache Bridge (NW ¼, NE ¼, Se	34.18	MILES
ID17040204SK020_03	Teton River - Teton Creek to Cache Bridge (NW ¼, NE ¼, Se	2.75	MILES
ID17040204SK021_02	Horseshoe Creek - pipeline diversion (SE ¼, NW ¼, Sec. 27,	2.48	MILES
ID17040204SK024_02	Mahogany Creek - pipeline diversion (NE ¼, Sec. 27, T4N, R4	8.61	MILES
ID17040204SK028_02	Teton River - confluence of Warm Creek and Drake Creek to	5.57	MILES
ID17040204SK029_02	Patterson Creek - pump diversion (SE ¼, Sec. 31, T4N, R44E)	1.55	MILES
ID17040204SK031_02	Grove Creek - source to sink	2.56	MILES
ID17040204SK034_03	Warm Creek - source to mouth	1.95	MILES
ID17040204SK035_03	Trail Creek - Trail Creek pipeline diversion (SW ¼, SE ¼, Se	7.87	MILES
ID17040204SK047_03	Teton Creek - Highway 33 bridge to mouth, including spring c	8.27	MILES
ID17040204SK051_02	Dry Creek - Idaho/Wyoming border to sinks (SE ¼, NE ¼, S12	2.95	MILES
ID17040204SK051_03	Dry Creek - Idaho/Wyoming border to sinks (SE ¼, NE ¼, S12	7.66	MILES
ID17040204SK053_02	South Leigh Creek - Idaho/Wyoming border to SE ¼, NE ¼, S	3.42	MILES
ID17040204SK054_02	Spring Creek - North Leigh Creek to mouth	4.06	MILES

ID17040204SK055_02	North Leigh Creek - Idaho/Wyoming border to mouth	4.99	MILES
ID17040204SK057_02	Badger Creek - spring (NW ¼, SW ¼, Sec. 26 T7N, R44E) to	5.85	MILES
ID17040204SK058_02	Badger Creek - diversion (NW ¼, SW ¼, Sec. 9, T6N, R45E) t	25.33	MILES
ID17040204SK059_02	Badger Creek - source to diversion (NW ¼, SW ¼, Sec. 9, T6	0.88	MILES
ID17040204SK060_02	South Fork Badger Creek - diversion (NE ¼, NE ¼, Sec. 12, T	2.08	MILES
ID17040204SK061_02	South Fork Badger Creek - Idaho/Wyoming border to diversion	3.08	MILES
ID17040204SK062_02	North Fork Badger Creek - Idaho/Wyoming border to mouth	9.36	MILES
ID17040204SK062_03	North Fork Badger Creek - Idaho/Wyoming border to mouth	2.09	MILES
ID17040204SK063_02	Bitch Creek - Swanner Creek to mouth	15.25	MILES
ID17040204SK064_02	Swanner Creek - Idaho/Wyoming border to mouth	30.83	MILES
ID17040204SK064_03	Swanner Creek - Idaho/Wyoming border to mouth	3.8	MILES
ID17040204SK065_02	Bitch Creek - Idaho/Wyoming border to Swanner Creek	30.19	MILES
ID17040204SK065_02L	McRenolds Reservoir	4.15	ACRES

17040205 Willow

ID17040205SK001_02	Willow Creek - Ririe Reservoir Dam to Eagle Rock Canal	15.3	MILES
ID17040205SK002_02	01 & 02 Tribs to Ririe Reservoir	22.88	MILES
ID17040205SK003_02	Blacktail Creek - source to Ririe Reservoir	23.55	MILES
ID17040205SK003_03	Blacktail Creek - source to Ririe Reservoir	2.96	MILES
ID17040205SK004_02	Willow Creek - Bulls Fork to Ririe Reservoir	5.67	MILES
ID17040205SK005_03	Willow Creek - Birch Creek to Bulls Fork	2.9	MILES
ID17040205SK007_02	Squaw Creek - source to mouth	10.76	MILES
ID17040205SK014_02L	Rat Lake	12.85	ACRES
ID17040205SK015_02L	Robinson Reservoir	12.94	ACRES
ID17040205SK016_02	Grays Lake outlet - Hell Creek to mouth	11.31	MILES
ID17040205SK017_02	Grays Lake outlet - Homer Creek to Hell Creek	11.62	MILES
ID17040205SK018_02L	Unnamed Lake Trib to Homer Creek	2.81	ACRES
ID17040205SK019_02	Grays Lake outlet - Brockman Creek to Homer Creek	22.22	MILES
ID17040205SK021_02L	Grays Lake	23678.06	ACRES
ID17040205SK022_02	Little Valley Creek - source to mouth	11.83	MILES
ID17040205SK022_02L	Little Valley Reservoir	263.99	ACRES
ID17040205SK023_03	Gravel Creek - source to mouth	6.9	MILES
ID17040205SK030_03	Bulls Fork - source to mouth	0.78	MILES

17040206 American Falls

ID17040206SK000_02	Unclassified Waters in CU 17040206	846.11	MILES
ID17040206SK000_02L	Unclassified Lakes in CU 17040206	24.91	ACRES
ID17040206SK000_03	Unclassified Waters in CU 17040206	42	MILES
ID17040206SK001_02	American Falls Reservoir 1st and 2nd order tribs	47.66	MILES

ID17040206SK003_02	Starlight Creek - source to mouth	17.44	MILES
ID17040206SK004_02	Blind Spring - source to mouth	26.63	MILES
ID17040206SK005_03	Sunbeam Creek	2.81	MILES
ID17040206SK006_03	Moonshine Creek - source to mouth	1.16	MILES
ID17040206SK006_04	Moonshine Creek - source to mouth	5.02	MILES
ID17040206SK007_02	Sawmill Creek - source to mouth	18.06	MILES
ID17040206SK007_03	Sawmill Creek - source to mouth	3.61	MILES
ID17040206SK011_02	Clifton Creek - source to mouth	14.92	MILES
ID17040206SK013_03	Michaud Creek	1.13	MILES
ID17040206SK014_02	Ross Fork - Gibson Canal to American Falls Reservoir	1.18	MILES
ID17040206SK014_04	Ross Fork - Gibson Canal to American Falls Reservoir	7.92	MILES
ID17040206SK015_02	Ross Fork - Indian Creek to Gibson Canal	41.05	MILES
ID17040206SK015_04	Ross Fork - Indian Creek to Gibson Canal	8.25	MILES
ID17040206SK016_02	Indian Creek - source to mouth	8.06	MILES
ID17040206SK017_02	South Fork Ross Fork - source to mouth	47.42	MILES
ID17040206SK017_03	South Fork Ross Fork - source to mouth	7.61	MILES
ID17040206SK018_02	Ross Fork - source to South Fork Ross Fork	111.71	MILES
ID17040206SK018_03	Ross Fork - source to South Fork Ross Fork	10.88	MILES
ID17040206SK018_04	Ross Fork - source to South Fork Ross Fork	3.83	MILES
ID17040206SK019_02	Clear Creek - source to American Falls Reservoir	11.9	MILES
ID17040206SK020_02	Spring Creek - source to American Falls Reservoir	19.44	MILES
ID17040206SK021_02	Big Jimmy Creek - source to American Falls Reservoir	8.3	MILES
ID17040206SK022_02L	Jensens Lake	65.07	ACRES
ID17040206SK022_03	Snake River - river mile 791 (T01N, R37E, Sec. 10) to Americ	2.3	MILES
ID17040206SK023_02	Jeff Cabin Creek - source to mouth	8.06	MILES
ID17040206SK025_02	Little Hole Draw - source to American Falls Reservoir	51.43	MILES
ID17040206SK026_02	Pleasant Valley - source to American Falls Reservoir	76.23	MILES
ID17040206SK026_03	Pleasant Valley - source to American Falls Reservoir	12.18	MILES

17040207 Blackfoot

ID17040207SK000_02	Unclassified Waters in CU 17040207	0.84	MILES
ID17040207SK001_02	Blackfoot River - Fort Hall Main Canal diversion to mouth	12.9	MILES
ID17040207SK001_05	Blackfoot River - Fort Hall Main Canal diversion to mouth	14.85	MILES
ID17040207SK002_02	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main	248.28	MILES
ID17040207SK002_02L	Equalizing Reservoir	225.22	ACRES
ID17040207SK002_03	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main	1.76	MILES
ID17040207SK002_04	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main	5.97	MILES
ID17040207SK003_02	Garden Creek - source to mouth	11.53	MILES
ID17040207SK004_02	Wood Creek - source to mouth	17.55	MILES

ID17040207SK004_03	Wood Creek - source to mouth	3.74	MILES
ID17040207SK006_02aL	Chicken Creek Reservoir	8.49	ACRES
ID17040207SK009_02	Blackfoot Reservoir 1st and 2nd order tributaries	112.82	MILES
ID17040207SK009_02L	Enders Pond	48.12	ACRES
ID17040207SK009L_0L	Blackfoot Reservoir	17457.29	ACRES
ID17040207SK017_02	Timothy Creek - source to mouth	5.34	MILES
ID17040207SK017_02b	lower Timothy Creek	1.48	MILES
ID17040207SK021_02	Chippy Creek - source to mouth	17.29	MILES
ID17040207SK021_02b	lower Olsen Creek	0.94	MILES
ID17040207SK024_02	Wooley Valley - source to mouth	21.39	MILES
ID17040207SK025_02b	Sheep Creek	4.27	MILES
ID17040207SK025_03a	lower Clark's Cut - Meadow Creek to Sheep Creek	1.23	MILES

17040208 Portneuf

ID17040208SK001_02b	Trail Creek	5.6	MILES
ID17040208SK001_03	Blackrock Canyon - lower	1.5	MILES
ID17040208SK006_02	Marsh Creek - source to mouth - Second order tributaries	211.16	MILES
ID17040208SK006_02L	Wiregrass Reservoir	4.13	ACRES
ID17040208SK012_02	Hawkins Reservoir - Stream order 01 trib to.	1.1	MILES
ID17040208SK018_02L	Twentyfour Mile Reservoir	34.01	ACRES
ID17040208SK019_02	01 & 02 Tribs to Chesterfield Reservoir	18.12	MILES
ID17040208SK019L_0L	Chesterfield Reservoir	1245.41	ACRES
ID17040208SK021_02L	Blue Lake	2.5	ACRES

17040209 Lake Walcott

ID17040209SK000_02	Unclassified Waters in CU 17040209	524.51	MILES
ID17040209SK000_02A	Dayley Creek	46.09	MILES
ID17040209SK000_02L	Unclassified Farm Pond in 17040209	9.39	ACRES
ID17040209SK000_03	Unclassified Waters in CU 17040209	19.54	MILES
ID17040209SK001_03	Snake River - Heyburn/Burley Bridge (T10S, R23E, Sec.17) to	0.3	MILES
ID17040209SK003_02A	Intermittent streams of Marsh Creek - source to mouth	15.51	MILES
ID17040209SK003_04A	Howell Creek. This AU is split and indicats dry streams	3.05	MILES
ID17040209SK003_04L	Dewy Pond (Marsh Creek Source to Mouth)	79.07	ACRES
ID17040209SK004_02	Lake Walcott (Snake River)	6.27	MILES
ID17040209SK006_02	Snake River - Rock Creek to Raft River	73.92	MILES
ID17040209SK006_03	Snake River - Rock Creek to Raft River	7.96	MILES
ID17040209SK007_02	Fall Creek - source to mouth	17.46	MILES
ID17040209SK007_03	Fall Creek - source to mouth	0.66	MILES
ID17040209SK008_02	Rock Creek - confluence of South and East Fork Rock Creeks	76.02	MILES

ID17040209SK011_03	Snake River - American Falls Reservoir Dam to Rock Creek	2.82	MILES

17040210 Raft

ID17040210SK001_02	Raft River - Heglar Canyon Creek to mouth	68.38	MILES
ID17040210SK001_03	Raft River - Heglar Canyon Creek to mouth	5.77	MILES
ID17040210SK002_02A	Coe Creek	53.85	MILES
ID17040210SK002_03	Raft River - Cassia Creek to Heglar Canyon Creek	14.95	MILES
ID17040210SK003_02	Cassia Creek - Conner Creek to mouth	74.39	MILES
ID17040210SK004_03	Conner Creek - source to mouth	2.45	MILES
ID17040210SK005_02	Cassia Creek - Clyde Creek to Conner Creek	72.11	MILES
ID17040210SK005_03	Cassia Creek - Clyde Creek to Conner Creek	3.39	MILES
ID17040210SK006_03	Clyde Creek - source to mouth	4.32	MILES
ID17040210SK007_02L	Independence Lakes	24.11	ACRES
ID17040210SK008_02	Raft River - Cottonwood Creek to Cassia Creek	135.42	MILES
ID17040210SK008_03	Raft River - Cottonwood Creek to Cassia Creek	0.33	MILES
ID17040210SK009_02	Cottonwood Creek - source to mouth	23.54	MILES
ID17040210SK009_03	Cottonwood Creek - source to mouth	0.17	MILES
ID17040210SK010_02	Raft River - Unnamed Tributary (T15S, R26E, Sec. 24) to Cott	167.83	MILES
ID17040210SK010_03	Raft River - Unnamed Tributary (T15S, R26E, Sec. 24) to Cott	10.3	MILES
ID17040210SK010_03L	Unnamed Ponds- One Mile Creek	4.46	ACRES
ID17040210SK012_03	Edwards Creek - source to mouth	7.36	MILES
ID17040210SK013_02	Raft River - Idaho/Utah border to Edwards Creek	61.22	MILES
ID17040210SK013_03	Raft River - Idaho/Utah border to Edwards Creek	16.54	MILES
ID17040210SK014_02	Junction Creek - source to Idaho/Utah border	24.48	MILES
ID17040210SK015_02	Cottonwood Creek - source to Idaho/Utah border	26.33	MILES
ID17040210SK015_03	Cottonwood Creek - source to Idaho/Utah border	1.06	MILES
ID17040210SK016_02	Clear Creek - Idaho/Utah border to mouth	328.13	MILES
ID17040210SK016_03	Clear Creek - Idaho/Utah border to mouth	25.02	MILES
ID17040210SK016_04	Clear Creek - Idaho/Utah border to mouth	12.37	MILES
ID17040210SK017_02	Kelsaw Canyon Creek - source to mouth	15.76	MILES
ID17040210SK018_02	Meadow Creek - source to mouth	111.48	MILES
ID17040210SK018_03	Meadow Creek - source to mouth	21.29	MILES
ID17040210SK021_02	Sublett Creek - source to Sublett Reservoir	38.44	MILES
ID17040210SK023_02	Heglar Canyon Creek - source to mouth	74.02	MILES
ID17040210SK023_03	Heglar Canyon Creek - source to mouth	10.36	MILES
ID17040210SK023_04	Heglar Canyon Creek - source to mouth	8.45	MILES

17040211 Goose

ID17040211SK000_02	Unclassified Waters in CU 17040211	119.3	MILES

ID17040211SK000_03	Unclassified Waters in CU 17040211	11.51	MILES
ID17040211SK002_02	Lower Goose Creek	33.29	MILES
ID17040211SK002_03	Lower Goose Creek	1.62	MILES
ID17040211SK014_02	Land-Willow-Smith Creek complex	109.14	MILES
ID17040211SK014_03	Land/Willow/Smith Creek complex	14.04	MILES

17040212 Upper Snake-Rock

ID17040212SK000_03	Unclassified Waters in CU 17040212	15.85	MILES
ID17040212SK002_02	Big Pilgrim Gulch - source to mouth	30.74	MILES
ID17040212SK003_02	Cassia Gulch - source to mouth	22.06	MILES
ID17040212SK003_03	Cassia Gulch - source to mouth	0.48	MILES
ID17040212SK004_02	Tuana Gulch - source to mouth	72.89	MILES
ID17040212SK009_02	Deep Creek - source to High Line Canal	13.29	MILES
ID17040212SK014_03	Cottonwood Creek - source to mouth	4.23	MILES
ID17040212SK014_04L	McMullen Creek Reservoir	50.94	ACRES
ID17040212SK016_02	Rock Creek - Fifth Fork Rock Creek to river mile 25 (T11S, R	23.62	MILES
ID17040212SK016_03	Rock Creek - Fifth Fork Rock Creek to river mile 25 (T11S, R	0.36	MILES
ID17040212SK021_0L	Murtaugh Lake	836.45	ACRES
ID17040212SK025_02	Big Cottonwood Creek - source to mouth	11.74	MILES
ID17040212SK026_03L	Wilson Lake Reservoir	513.98	ACRES
ID17040212SK029_02	Banbury Springs	0.56	MILES
ID17040212SK030_02	Box Canyon Creek - source to mouth	2.11	MILES
ID17040212SK032_02	Bickel Springs	1.77	MILES
ID17040212SK034_02	Clover Creek - Pioneer Reservoir Dam to mouth	42.61	MILES
ID17040212SK036_03	Clover Creek - source to Pioneer Reservoir	0.58	MILES
ID17040212SK037_02	Cottonwood Creek - source to mouth	20.75	MILES
ID17040212SK037_03	Cottonwood Creek - source to mouth	0.71	MILES
ID17040212SK038_03	Catchall Creek - source to mouth	1.3	MILES
ID17040212SK039_02	Deer Creek - source to mouth	19.07	MILES
ID17040212SK041_02	Dry Creek - source to mouth	48.64	MILES
ID17040212SK041_03	Dry Creek - source to mouth	12.02	MILES

17040213 Salmon Falls

ID17040213SK000_02	Unclassified Waters in CU 17040213	49.56	MILES
ID17040213SK000_03	Unclassified Waters in CU 17040213	2.92	MILES
ID17040213SK001_02	Salmon Falls Creek - Devil Creek to mouth	26.65	MILES
ID17040213SK001_02L	Unnamed Pond - Salmon Falls Creek	4.53	ACRES
ID17040213SK002_02	Devil Creek-1st and 2nd order tribs.	165.67	MILES
ID17040213SK002_02L	Heil Reservoir (Heil Dam)	47.69	ACRES

ID17040213SK003_01L	Unnamed Farm Ponds - ID17040213_02	7.84	ACRES
ID17040213SK003_02	Salmon Falls Creek - Salmon Falls Creek Dam to Devil Creek	132.75	MILES
ID17040213SK003_02L	Cedar Mesa Reservoir	23.34	ACRES
ID17040213SK003_03	Salmon Falls Creek - Salmon Falls Creek Dam to Devil Creek	2.23	MILES
ID17040213SK004_03	Trib to Cedar Creek Reservoir	0.83	MILES
ID17040213SK007_02L	Whiskey Slough	3.43	ACRES
ID17040213SK007_06	Salmon Falls Creek	0.94	MILES
ID17040213SK009_02	Salmon Falls Creek - Idaho/Nevada border to Salmon Falls Cr	42.23	MILES
ID17040213SK009_03	Salmon Falls Creek - Idaho/Nevada border to Salmon Falls Cr	1.7	MILES
ID17040213SK011_02	Shoshone Creek - Hot Creek to Idaho/Nevada border	85.58	MILES
ID17040213SK011_03	Shoshone Creek - Hot Creek to Idaho/Nevada border	2.45	MILES
ID17040213SK013_02	Shoshone Creek - Cottonwood Creek to Hot Creek	25.13	MILES
ID17040213SK016_02L	Unnamed diversion trib to Shoshone Creek	7.17	ACRES

17040214 Beaver-Camas

ID17040214SK001_02	Camas Creek - Beaver Creek to Mud Lake	4.59	MILES
ID17040214SK001_05	Camas Creek - Beaver Creek to Mud Lake	7.1	MILES
ID17040214SK001_05L	Sandhole Lake	142.06	ACRES
ID17040214SK001_06L	Rays Lake	192.79	ACRES
ID17040214SK002_02	Camas Creek - Spring Creek to Beaver Creek	29.09	MILES
ID17040214SK004_02	Spring Creek - Dry Creek to mouth	2.59	MILES
ID17040214SK004_04	Spring Creek - Dry Creek to mouth	8.73	MILES
ID17040214SK005_03	Dry Creek - source to mouth	12.83	MILES
ID17040214SK006_02L	Spring Creek Reservoir	8.13	ACRES
ID17040214SK007_04	Camas Creek - confluence of West and East Camas Creeks t	17.96	MILES
ID17040214SK008_03L	Unnamed Lake - Crab Creek	4.24	ACRES
ID17040214SK009_03	Warm Creek - Cottonwood Creek to mouth and East Camas C	21.11	MILES
ID17040214SK009_04	Warm Creek - Cottonwood Creek to mouth and East Camas C	6.54	MILES
ID17040214SK014_02	Beaver Creek - Dry Creek to canal (T09N, R36E)	89.83	MILES
ID17040214SK014_02L	Unnamed Ponds - Beaver Creek to Dry Creek	16.47	ACRES
ID17040214SK014_03	Beaver Creek - Dry Creek to canal (T09N, R36E)	3.15	MILES
ID17040214SK015_02	Beaver Creek - Rattlesnake Creek to Dry Creek	1.39	MILES
ID17040214SK016_04	Rattlesnake Creek - source to mouth	1.06	MILES
ID17040214SK019_02	Miners Creek - source to mouth	21.06	MILES
ID17040214SK019_03	Miners Creek - source to mouth	0.97	MILES
ID17040214SK025_02	Dry Creek - source to mouth	23.62	MILES
ID17040214SK025_03	Dry Creek - source to mouth	7.08	MILES
ID17040214SK026_02	Cottonwood Creek complex	89.33	MILES

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17040215 Medicine Lodge

ID17040215SK001_06L	Mud Lake	3094.08	ACRES
ID17040215SK001_0L	North Lake	764.14	ACRES
ID17040215SK002_01L	Unnamed Intermittent Lake	11.87	ACRES
ID17040215SK002_02	Medicine Lodge Creek - Indian Creek to playas	56.24	MILES
ID17040215SK004_02	East Fork Indian Creek	14.13	MILES
ID17040215SK006_02	Medicine Lodge Creek - Edie Creek to Indian Creek	8.42	MILES
ID17040215SK019_02	Blue Creek - source to mouth	29.16	MILES
ID17040215SK022_02	Chandler Canyon complex	90.14	MILES
ID17040215SK022_03	Chandler Canyon complex	11.36	MILES

17040216 Birch

ID17040216SK001_02	Birch Creek - Reno Ditch to playas	200.7	MILES
ID17040216SK001_03	Birch Creek - Reno Ditch to playas	2.79	MILES
ID17040216SK002_02	Birch Creek - Pass Creek to Reno Ditch	18.69	MILES
ID17040216SK003_02	Birch Creek - Unnamed Tributary (T11N, R11W, Sec. 35) to P	43.74	MILES
ID17040216SK003_04	Birch Creek - Unnamed Tributary (T11N, R11W, Sec. 35) to P	6.73	MILES
ID17040216SK004_02	Unnamed Tributary - source to mouth; includes Timber Can yo	32.92	MILES
ID17040216SK004_03	Unnamed Tributary - source to mouth; includes Timber Can yo	2.53	MILES
ID17040216SK005_02	Birch Creek - confluence of Mud and Scott Canyon Creeks to	19.6	MILES
ID17040216SK005_03	Birch Creek - confluence of Mud and Scott Canyon Creeks to	2.44	MILES
ID17040216SK005_04	Birch Creek - confluence of Mud and Scott Canyon Creeks to	1.76	MILES
ID17040216SK006_02	Scott Canyon Creek - source to mouth	16.84	MILES
ID17040216SK007_02	Mud Creek - Willow Creek to Scott Canyon Creek	2.63	MILES
ID17040216SK007_03	Mud Creek - Willow Creek to Scott Canyon Creek	4.67	MILES
ID17040216SK008_02	Cedar Gulch and Irish Canyon - source to mouth	29.73	MILES
ID17040216SK010_02	Mud Creek - Unnamed Tributary (T12N, R11W, Sec. 29) to Wi	39.09	MILES
ID17040216SK010_03	Mud Creek - Unnamed Tributary (T12N, R11W, Sec. 29) to Wi	2.51	MILES
ID17040216SK011_02	Mud Creek - source to Unnamed Tributary (T12N, R11W, Sec.	41.95	MILES
ID17040216SK011_03	Mud Creek - source to Unnamed Tributary (T12N, R11W, Sec.	5.99	MILES
ID17040216SK012_02	Unnamed Tributary - source to mouth (T12N, R11W, Sec. 29)	49.59	MILES
ID17040216SK012_03	Unnamed Tributary - source to mouth (T12N, R11W, Sec. 29)	0.58	MILES
ID17040216SK013_02	Meadow Canyon Creek - source to mouth	23.86	MILES
ID17040216SK013_03	Meadow Canyon Creek - source to mouth	7.15	MILES
ID17040216SK014_02	Rocky Canyon Creek - source to mouth	15.7	MILES
ID17040216SK015_02	Pass Creek - source to mouth	43.44	MILES
ID17040216SK016_02	Eightmile Canyon Creek - source to mouth	50.76	MILES
ID17040216SK016_03	Eightmile Canyon Creek - source to mouth	4.68	MILES

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17040217 Little Lost

ID17040217SK001_03	Little Lost River - canal (T06N, R28E) to playas	0.14	MILES
ID17040217SK002_02	Little Lost River - Big Spring Creek to canal (T06N, R28E)	10.27	MILES
ID17040217SK004_03	North Creek - source to mouth	5.78	MILES
ID17040217SK005_03	Uncle Ike Creek - source to mouth	4.47	MILES
ID17040217SK006_02	Unnamed Tributaries - source to mouth (T08N, R28E)	80.01	MILES
ID17040217SK007_03	Little Lost River - Badger Creek to Big Spring Creek	4.13	MILES
ID17040217SK010_02	Little Lost River - confluence of Summit and Sawmill Creeks	15.02	MILES
ID17040217SK010_03	Little Lost River - confluence of Summit and Sawmill Creeks	1.04	MILES
ID17040217SK011_02	Deep Creek - source to mouth	28.26	MILES
ID17040217SK012_03	Sawmill Creek - Warm Creek to mouth	2.53	MILES
ID17040217SK014_02L	Mill Creek Lake	15.72	ACRES
ID17040217SK020_02	Dry Creek - Dry Creek Canal to mouth	24.79	MILES
ID17040217SK021_02L	Shadow Lakes	9.25	ACRES
ID17040217SK022_02	Wet Creek - Squaw Creek to mouth	19.66	MILES
ID17040217SK024_02L	Unnamed Lake - Big Creek	3.34	ACRES
ID17040217SK026_02	Taylor Canyon Creek - source to mouth	36.22	MILES
ID17040217SK026_04	Taylor Canyon Creek - source to mouth	1.72	MILES
ID17040217SK027_02	Cabin Fork Creek - source to mouth	30.6	MILES
ID17040217SK027_03	Cabin Fork Creek - source to mouth	4.98	MILES
ID17040217SK028_02	Hurst Creek - source to mouth	48.43	MILES
ID17040217SK028_03	Hurst Creek - source to mouth	9.65	MILES
ID17040217SK029_02	Unnamed Tributary - source to mouth (T5N, R29E, Sec. 04 an	8.88	MILES

17040218 Big Lost

ID17040218SK001_02	Big Lost River Sinks (playas) and Dry Channel	2.08	MILES
ID17040218SK001_06	Big Lost River Sinks (playas) and Dry Channel	32.37	MILES
ID17040218SK002_02	Big Lost River - Spring Creek to Big Lost River Sinks (playa	441.96	MILES
ID17040218SK002_02L	Unnamed Waterbody in ID17040218SK002_02	17.95	ACRES
ID17040218SK002_03	Big Lost River - Spring Creek to Big Lost River Sinks (playa	5.96	MILES
ID17040218SK002_04	Big Lost River - Spring Creek to Big Lost River Sinks (playa	6.05	MILES
ID17040218SK003_02	Spring Creek - Lower Pass Creek to Big Lost River	31.37	MILES
ID17040218SK004_02	Big Lost River - Antelope Creek to Spring Creek	40.67	MILES
ID17040218SK004_06	Big Lost River - Antelope Creek to Spring Creek	38	MILES
ID17040218SK005_02	King, Lime Kiln, Ramshorn, and Anderson Canyon Creek - sou	36.68	MILES
ID17040218SK005_06	King, Lime Kiln, Ramshorn, and Anderson Canyon Creek - sou	0.21	MILES
ID17040218SK006_02	Lower Pass Creek - source to mouth	13.58	MILES
ID17040218SK006_05	Lower Pass Creek - source to mouth	5.32	MILES

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ID17040218SK006_06	Lower Pass Creek - source to mouth	3.95	MILES
ID17040218SK007_02	Big Lost River - Alder Creek to Antelope Creek	7.17	MILES
ID17040218SK007_05	Big Lost River - Alder Creek to Antelope Creek	16.56	MILES
ID17040218SK008_02	Elbow, Jepson, Clark, Maddock, and Jaggles Canyon Creek -	35.46	MILES
ID17040218SK008_03	Elbow, Jepson, Clark, Maddock, and Jaggles Canyon Creek -	3.95	MILES
ID17040218SK009_02L	Mud Lake	6.25	ACRES
ID17040218SK009_03	Pass Creek - source to mouth	10.22	MILES
ID17040218SK010_02	Big Lost River - Beck and Evan Ditch to Alder Creek	2.79	MILES
ID17040218SK010_05	Big Lost River - Beck and Evan Ditch to Alder Creek	7.82	MILES
ID17040218SK011_02	Big Lost River - McKay Reservoir Dam to Beck and Evan Ditch	76.64	MILES
ID17040218SK011_05	Big Lost River - McKay Reservoir Dam to Beck and Evan Ditch	14.72	MILES
ID17040218SK012_02	01 & 02 tribs to McKay Reservoir	30.71	MILES
ID17040218SK012L_0L	McKay Reservoir	1173.75	ACRES
ID17040218SK013_02	Big Lost River - Jones Creek to McKay Reservoir	11.86	MILES
ID17040218SK014_02	Jones Creek - source to mouth	10.17	MILES
ID17040218SK015_02	Big Lost River - Thousand Springs Creek to Jones Creek	19.66	MILES
ID17040218SK016_05	Thousand Springs Creek - source to mouth	8.86	MILES
ID17040218SK017_02	Lone Cedar Creek - source to mouth	5.7	MILES
ID17040218SK018_02	Cedar Creek - source to mouth	6.85	MILES
ID17040218SK020_02	Willow Creek - source to mouth	19.29	MILES
ID17040218SK021_02	Arentson Gulch and Unnamed Tributaries - source to mouth (T	35.86	MILES
ID17040218SK022_03	Sage Creek - source to mouth	7.65	MILES
ID17040218SK023_05	Parsons Creek - T8N, R22E, Sec. 24, point of perennial flow	11.13	MILES
ID17040218SK025_04	Big Lost River - Summit Creek to and including Burnt Creek	4.96	MILES
ID17040218SK027_02L	North Fork Lakes	7.49	ACRES
ID17040218SK032_02	Fall Creek - source to mouth	22.22	MILES
ID17040218SK032_02L	Moose Lakes	12.43	ACRES
ID17040218SK034_02	Fox Creek - source to mouth	9.04	MILES
ID17040218SK036_02L	Broad Canyon Lakes	41.18	ACRES
ID17040218SK038_02L	Long and Rough Lakes	22	ACRES
ID17040218SK041_03	Corral Creek - source to mouth	2.19	MILES
ID17040218SK042_02	Boone Creek - source to mouth	11.96	MILES
ID17040218SK043_02L	Lehman Creek Lake	1.98	ACRES
ID17040218SK045_05	Alder Creek - source to mouth	4.65	MILES
ID17040218SK047_02	Antelope Creek - Dry Fork Creek to Spring Creek	9.64	MILES
ID17040218SK047_05	Antelope Creek - Dry Fork Creek to Spring Creek	0.25	MILES
ID17040218SK048_02	Spring Creek - source to mouth	9.99	MILES
ID17040218SK049_02	Cherry Creek - confluence of Left Fork Cherry and Lupine Cre	37.13	MILES

ID17040218SK050_02	Lupine Creek - source to mouth	24.24	MILES
ID17040218SK054_02	Iron Bog Creek - confluence of Left and Right Fork Iron Bog	1.52	MILES
ID17040218SK057_02	Antelope Creek - source to Iron Bog Creek	19.16	MILES
ID17040218SK058_02	Leadbelt Creek - source to mouth	16.82	MILES
ID17040218SK059_02	Dry Fork Creek - source to mouth	37.03	MILES
ID17040218SK059_03	Dry Fork Creek - source to mouth	15.09	MILES
ID17040218SK059_05	Dry Fork Creek - source to mouth	8.72	MILES
ID17040218SK060_02	South Fork Antelope Creek - Antelope Creek to mouth	4.48	MILES
ID17040218SK061_02	Hammond Spring Creek complex	69.6	MILES
ID17040218SK061_03	Hammond Spring Creek complex	5.8	MILES

17040219 Big Wood

ID17040219SK000_01L	Turkey Lake	4.9	ACRES
ID17040219SK000_02	Unclassified Waters in CU 17040219	250.7	MILES
ID17040219SK000_02L	Unnamed Reservoir - Unclassified Waters in CU 17040219	5.29	ACRES
ID17040219SK000_03	Unclassified Waters in CU 17040219	2.13	MILES
ID17040219SK000_05	Unclassified Waters in CU 17040219	9	MILES
ID17040219SK001_02	Malad River - confluence of Black Canyon Creek and Big Woo	16.75	MILES
ID17040219SK002_02	Big Wood River - Magic Reservoir Dam to mouth	48.02	MILES
ID17040219SK002_03	Big Wood River - Magic Reservoir Dam to mouth	3.1	MILES
ID17040219SK003_02	01 & 02 Tribs to Magic Reservoir	12.08	MILES
ID17040219SK004_02	Big Wood River - Seamans Creek to Magic Reservoir	87.75	MILES
ID17040219SK004_03	Big Wood River - Seamans Creek to Magic Reservoir	5.45	MILES
ID17040219SK005_02	Seamans Creek - Slaughterhouse Creek to mouth	5.26	MILES
ID17040219SK006_03L	Seaman Creek Diversion Pond	9	ACRES
ID17040219SK008_02L	Quigley Pond	5.65	ACRES
ID17040219SK009_02	Indian Creek - source to mouth	12.95	MILES
ID17040219SK010_02	East Fork Wood River - Hyndman Creek to mouth	14.2	MILES
ID17040219SK011_04	East Fork Wood River - source to Hyndman Creek	2.04	MILES
ID17040219SK013_02	Trail Creek - Corral Creek to mouth	7.76	MILES
ID17040219SK015_02	Lake Creek - source to mouth	10.64	MILES
ID17040219SK025_02a	Greenhorn Creek - USFS boundary to mouth	4.5	MILES
ID17040219SK027_02L	Unnamed Lake Democrat Gulch	4.62	ACRES
ID17040219SK029_02L	Thorn Creek Reservoir	110.19	ACRES
ID17040219SK029_03	Thorn Creek - source to mouth	7.09	MILES
ID17040219SK029_04	Thorn Creek - source to mouth	5.35	MILES
ID17040219SK030_03L	Bray Lake	140.75	ACRES
ID17040219SK030_04	Black Canyon Creek - source to mouth	9.08	MILES

17040220 Camas

ID17040220SK001_02	Camas Creek - Elk Creek to Magic Reservoir	49.49	MILES
ID17040220SK001_05L	Magic Reservoir - Camas Creek	290.08	ACRES
ID17040220SK003_02	Willow Creek - Beaver Creek to mouth	8.98	MILES
ID17040220SK007_02	Camas Creek - Solider Creek to Elk Creek	12.17	MILES
ID17040220SK008_02	Deer Creek - Big Deer Creek to mouth	13.51	MILES
ID17040220SK008_03	Deer Creek - Big Deer Creek to mouth	11.78	MILES
ID17040220SK008_04	Deer Creek - Big Deer Creek to mouth	0.38	MILES
ID17040220SK009_02	Deer Creek - source to and including Big Deer Creek	13.8	MILES
ID17040220SK010_02	Powell Creek - source to mouth	16.77	MILES
ID17040220SK013_02	Camas Creek - Corral Creek to Soldier Creek	36.96	MILES
ID17040220SK013_03	Camas Creek - Corral Creek to Soldier Creek	11.43	MILES
ID17040220SK014_02	Threemile Creek - source to mouth	21.75	MILES
ID17040220SK016_03	East Fork Corral Creek - source to mouth	1.9	MILES
ID17040220SK018_02L	Unnamed Diversion to Camas Creek	7.79	ACRES
ID17040220SK019_03	Chimney Creek - source to mouth	2.54	MILES
ID17040220SK019_04	Chimney Creek - source to mouth	7.61	MILES
ID17040220SK020_02	Negro Creek - source to mouth	21.25	MILES
ID17040220SK020_03	Negro Creek - source to mouth	0.43	MILES
ID17040220SK021_02	Wildhorse Creek - source to mouth	35.56	MILES
ID17040220SK022_02	Malad River - source to mouth	36.34	MILES
ID17040220SK022_03	Malad River - source to mouth	8.75	MILES
ID17040220SK023_02	01 & 02 Tribs near Mormon Reservoir	7.74	MILES
ID17040220SK023_03	03 Trib to Mormon Reservoir	0.43	MILES
ID17040220SK026_02	Spring Creek Complex	18.19	MILES
ID17040220SK026_02L	Spring Creek Reservoir	52.57	ACRES
ID17040220SK026_03	Spring Creek Complex	7.15	MILES
ID17040220SK027_02	Kelly Reservoir - 1st and 2nd order tribs.	3.12	MILES
ID17040220SK027L_0L	Kelly Reservoir	96.12361	ACRES

17040221 Little Wood

ID17040221SK000_02	Unclassified Waters in CU 17040221	185.66	MILES
ID17040221SK000_03	Unclassified Waters in CU 17040221	39.19	MILES
ID17040221SK000_03L	Mud Lake	19.75	ACRES
ID17040221SK001_02	Little Wood River - Richfield (T04S, R19E, Sec. 25) to mouth	26.51	MILES
ID17040221SK001_05a	Little Wood River	29.45	MILES
ID17040221SK001_05b	Little Wood River	5.67	MILES
ID17040221SK002_02	Little Wood River - Carey Lake outlet to Richfield (T04S, R1	1.28	MILES

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ID17040221SK004_04	Carey Lake outlet	1.07	MILES
ID17040221SK005_02	Carey Lake - tributaries order 01 & 02	1.35	MILES
ID17040221SK005L_0L	Carey Lake	200.9	ACRES
ID17040221SK006_02	Fish Creek - Fish Creek Reservoir Dam to mouth	45.63	MILES
ID17040221SK006_02L	Huff Lake	35.15	ACRES
ID17040221SK007_02	Fish Creek Reservoir- Stream order 1 & 2	2.83	MILES
ID17040221SK009_02	West Fork Fish Creek - source to Fish Creek Reservoir	27.04	MILES
ID17040221SK010_02	Little Wood River - Little Wood River Reservoir Dam to Carey	39.46	MILES
ID17040221SK010_05a	Little Wood River	9.79	MILES
ID17040221SK011_02	Little Fish Creek - source to mouth	26.06	MILES
ID17040221SK011_02L	Howard Reservoir	24.88	ACRES
ID17040221SK011_03	Little Fish Creek - source to mouth	6.56	MILES
ID17040221SK011_03L	Cameron Reservoir (Little Fisher Creek)	28.73	ACRES
ID17040221SK012_02	01 & 02 tribs to Little Wood River Reservoir	16.61	MILES
ID17040221SK013_02	Little Wood River - Muldoon Creek to Little Wood River Reser	24.78	MILES
ID17040221SK013_02L	Campbell Reservoir	108.91	ACRES
ID17040221SK014_02L	Muldon Creek Lake	2.17	ACRES
ID17040221SK015_02	South Fork Muldoon Creek - Friedman Creek to mouth	9.83	MILES
ID17040221SK015_03	South Fork Muldoon Creek - Friedman Creek to mouth	8.02	MILES
ID17040221SK015_04	South Fork Muldoon Creek - Friedman Creek to mouth	3.17	MILES
ID17040221SK016_02	South Fork Muldoon Creek - source to Friedman Creek	21.81	MILES
ID17040221SK016_03	South Fork Muldoon Creek - source to Friedman Creek	2.7	MILES
ID17040221SK017_02	Friedman Creek - Trail Creek to mouth	4.65	MILES
ID17040221SK020_02L	Windy Lakes	28.74	ACRES
ID17040221SK021_03	Baugh Creek - source to mouth	3.81	MILES

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Appendix F. Category 4a—Total Maximum Daily Load Completed and Approved

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2010 Integrated Report: Category 4a: EPA Approved TMDLs

2010 Integrated Report: Category 4a: Impaired Waters with EPA Approved TMDLs

Bear River

16010102 Central Bear — TMDL Approval Date

BEAR RIVER/MALAD RIVER SUBBASIN ASSESSMENT AND TMDL PLAN — **2006-06-29**

ID16010102BR001_05	Bear River - Idaho/Wyoming border to railroad bridge (T14N,	30.87	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010102BR003_04	Thomas Fork - Idaho/Wyoming border to mouth	30.09	MILES

Total Suspended Solids (TSS)

Nitrogen (Total)

Phosphorus (Total)

ID16010102BR008_02	Sheep Creek - source to mouth	22.65	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010102BR008_03	Sheep Creek - source to mouth	2.64	MILES

Phosphorus (Total)

Sedimentation/Siltation — Refer to Bear River/Malad River Subbasin Assessment and TMDL Plan (March 2006).

16010201 Bear Lake — TMDL Approval Date

BEAR RIVER/MALAD RIVER SUBBASIN ASSESSMENT AND TMDL PLAN — **2006-06-29**

ID16010201BR001_0L	Alexander Reservoir (Bear River)	1013.13	ACRES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR002_02a	Sulpher Canyon - Headwaters (middle and S.Sulpher) to mout	12.23	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR002_02c	lower Skinner Creek - above Nounan Rd Crossing to Bear Riv	4.4	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID16010201BR002_05	Bear River -railroad bridge (T14N, R45E, Sec. 21) to Ovid Cr	54.43	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR002_06	Bear River - Ovid Cr confluence to Alexander Reservoir	44.35	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR003_02	lower Bailey Creek - FS boundary to mouth	3.07	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR003_02a	Upper Bailey Creek - HW to FS boundary	4.7	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR004_02	Eightmile Creek - headwaters to N. Wilson Creek	31.16	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR004_02a	South Wilson Creek	4.65	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR004_03	Eightmile Creek - 1 mile below FS boundary to mouth	4.43	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR004_03a	Eightmile Creek - N Wilson Cr to 1 mi below FS boundary	1.75	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID16010201BR005_02	lower Pearl Creek	0.51	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR005_02a	middle Pearl Creek	3.41	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR006_02c	N and S Stauffer Cr and Stauffer Cr to Beaver Cr	7.29	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR006_02d	Stauffer Creek - Beaver Cr to Spring Cr	5.24	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR006_03	Lower Stauffer Creek - Spring Creek to Bear River	4.14	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR007_02	Skinner Creek - unnamed tribs of Skinner Creek	8.81	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR007_02a	North and South Fork Skinner Creek	6.56	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID16010201BR009_04	Ovid Creek - confluence of North and Mill Creek to mouth	16.03	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR022_02a	Right Hand Fork Georgetown Creek	5.42	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR022_02b	Upper Georgetown Creek - headwaters to left hand fork	10.87	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR022_03a	Lower Georgetown Creek - left hand fork to mouth	3.89	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR023_02a	Soda Creek - Soda Cr Reservoir to Soda Springs	2.73	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR023_02b	lower Soda Creek - Soda Springs to Alexander Reservoir	1.01	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR024_02	Soda Creek Reservoir	202.63	ACRES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010201BR025_02	Soda Creek - source to Soda Creek Reservoir	16.08	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

BEAR RIVER/MALAD RIVER SUBBASIN ASSESSMENT AND TMDL PLAN **2006-06-29**

ID16010202BR002_04	Cub River - Maple Creek to Border	3.94	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR003_02	Cub River - Sugar Creek to US Hwy 91 Brid	12.72	MILES

Escherichia coli

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR003_02a	Maple Creek - Left Fk Maple Creek to Cub River	8.31	MILES

Escherichia coli

ID16010202BR003_03	Cub River - Sugar Creek to Maple Creek	5.29	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR003_03a	Maple Creek	3.8	MILES

Escherichia coli

ID16010202BR005_02	Worm Creek - unnamed tributaries	23.97	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR005_02b	Worm Creek (lower) - Glendale Reservoir to Border	12.89	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID16010202BR006_02	Bear River - Oneida Narrows Reservoir Dam to Idaho/Utah bor	49.9	MILES

Total Suspended Solids (TSS) Replaces Cause Unknown as a pollutant.

Phosphorus (Total) Replaces Cause Unknown as a pollutant.

ID16010202BR006_02a	Deep Creek	10.25	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID16010202BR006_06	Bear River - Oneida Narrows Reservoir Dam to Idaho/Utah bor	36.08	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR007_02	Mink Creek - source to mouth	40.78	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR007_03	Mink Creek - source to mouth	8.01	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR008_0L	Oneida Narrows Reservoir	420.08	ACRES

Total Suspended Solids (TSS)

Phosphorus (Total) — TMDLs were written for the mainstem Bear River and tributaries entering the reservoir, not for the reservoir itself. Refer to the Bear River/Malad River SBA and TMDL document and approval letter.

ID16010202BR009_02	Unnamed - several 1st order unnamed tribs	98.53	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR009_02a	Smith Creek - HW to mouth	9.05	MILES

Total Suspended Solids (TSS) — Replaces Cause Unknown as a pollutant.

Phosphorus (Total) — Replaces Cause Unknown as a pollutant.

ID16010202BR009_02b	Alder Creek - headwaters to mouth	17.67	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR009_02c	Burton Creek - headwaters to mouth	13.8	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR009_06	Bear River - Alexander Reservoir Dam to Denismore Creek	15.57	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR009_06a	Bear River - Denismore Cr to above Oneida Reservoir	21.56	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR010_02	Williams Creek - source to mouth	20.48	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR010_02a	Williams Creek - FS boundary to Bear River	4.01	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR011_02	Trout Creek - source to mouth	47.02	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR011_03	Trout Creek - source to mouth	3.95	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR012_02	Whiskey Creek - source to mouth	4.74	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR013_02	Densmore Creek - source to mouth	22.86	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR014_04	Cottonwood Creek - lower Cottonwood Creek (4th order)	14.01	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR015_02	Battle Creek - upper Battle Creek and unnamed tributaries	67.76	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR015_03	Battle Creek - source to mouth	3.03	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR015_04	Battle Creek - source to mouth	14.56	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR019_02	Fivemile Creek - source to Dayton	9.51	MILES

Total Suspended Solids (TSS) Replaces unknown as a pollutant.

Phosphorus (Total) Replaces unknown as a pollutant.

ID16010202BR019_02a	Fivemile Creek - Dayton to mouth	5.7	MILES

Total Suspended Solids (TSS)

Phosphorus (Total) Replaces unknown as a pollutant.

ID16010202BR020_02	Weston Creek - unnamed tributaries	29.81	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR020_02a	Black Canyon	15.11	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR020_02c	upper Weston Creek - FS boundary to reservoir	12.17	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR020_02d	Weston Cr - HW to FS boundary and Trail Hollow	10.74	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR020_03	Weston Creek - Dry Canyon to above Weston City	8.3	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010202BR020_04	Weston Creek - above Weston City to Bear River	4.7	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

16010204 Lower Bear-Malad TMDL Approval Date

BEAR RIVER/MALAD RIVER SUBBASIN ASSESSMENT AND TMDL PLAN 2006-06-29

ID16010204BR001_04	Malad River - Little Malad River to Idaho/Utah border	21.48	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR002_02	Devil Creek - Devil Creek Reservoir Dam to mouth	10.01	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR002_02a	Campbell Creek	2.86	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR002_02c	Evans Creek	2.63	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR002_03	Devil Creek - Devil Creek Reservoir Dam to mouth	25.2	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR005_03	Deep Creek - Deep Creek Reservoir Dam to mouth	10.02	MILES
Total Suspended Solids (TSS)	Replaces unknown as a pollutant.		
Phosphorus (Total)	Replaces unknown as a pollutant.		
ID16010204BR006_02	Susan Hollow	4.04	MILES
Total Suspended Solids (TSS)			
Phosphorus (Total)			
ID16010204BR006_03	Deep Creek Reservoir	0.34	MILES
Total Suspended Solids (TSS)	Replaces unknown as a pollutant.		
Phosphorus (Total)	Replaces unknown as a pollutant.		
ID16010204BR007_02	Deep Creek - source to upper Deep Creek Reservoir	5.05	MILES
Total Suspended Solids (TSS)	Replaces unknown as a pollutant.		
Phosphorus (Total)	Replaces unknown as a pollutant.		
ID16010204BR007_03	Deep Creek - upper Deep Creek Reservoir to Deep Cr Reserv	1.01	MILES
Total Suspended Solids (TSS)	Replaces unknown as a pollutant.		
Phosphorus (Total)	Replaces unknown as a pollutant.		
ID16010204BR008_02	Malad River - mouth and unnamed tributaries to N Fk Canyon	118.06	MILES
Total Suspended Solids (TSS)			
Phosphorus (Total)			
ID16010204BR008_02a	Elkhorn Creek - source to mouth	4.55	MILES
Total Suspended Solids (TSS)			
Phosphorus (Total)	Replaces unknown as a pollutant.		
ID16010204BR008_03	Little Malad River - Daniels Reservoir Dam to mouth	1.32	MILES
Total Suspended Solids (TSS)			
Phosphorus (Total)			
ID16010204BR008_04	Little Malad River - Daniels Reservoir Dam to mouth	24.55	MILES
Total Suspended Solids (TSS)			
Phosphorus (Total)			
ID16010204BR009_02	Little Malad River - headwaters to Daniels Reservoir	35.11	MILES
Total Suspended Solids (TSS)			
Phosphorus (Total)			
ID16010204BR010_02a	Indian Mill Creek	4.56	MILES
Total Suspended Solids (TSS)			
Phosphorus (Total)			

ID16010204BR010_02b	Upper Wright Creek - headwaters to Indian Mill Canyon	8.87	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR010_03	middle Wright Creek - Indian Mill Canyon to Dairy Creek	2.72	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR010_04	Wright Creek - Dairy Creek to Daniels Reservoir	4.16	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID16010204BR012_02	Malad River - source to Little Malad River	47.32	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

Clearwater

17060108 Palouse TMDL Approval Date

COW CREEK SUBBASIN TMDL 2006-02-13

ID17060108CL001_02	Cow Creek - source to Idaho/Washington border	84.63	MILES

Nutrient/Eutrophication Biological Indicators

ID17060108CL001_03	Cow Creek - source to Idaho/Washington border	10.71	MILES

Nutrient/Eutrophication Biological Indicators

PALOUSE RIVER (SOUTH FORK) TMDL 2007-10-01

ID17060108CL002_03	South Fork Palouse River - Gnat Creek to Idaho/Washington b	8.25	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL003_02	South Fork Palouse River - source to Gnat Creek; tribs	14.51	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL003_03	South Fork Palouse River - source to Gnat Creek	1.92	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

PALOUSE RIVER SUBBASIN TMDL **2005-03-14**

ID17060108CL011a_02	Flannigan Creek - source to T41N, R05W, Sec. 23	18.03	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL011a_03	Flannigan Creek - source to T41N, R05W, Sec. 23	3.06	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL011b_02	Flannigan Creek - T41N, R05W, Sec. 23 to mouth	2.92	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL011b_03	Flannigan Creek - T41N, R05W, Sec. 23 to mouth	3.71	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL012_03	Rock Creek-confluence of WF and EF Rock Cr to mouth	1.73	MILES

Escherichia coli

Sedimentation/Siltation

ID17060108CL013a_02	West Fork Rock Creek - source to T41N, R04W, Sec. 30	5.68	MILES

Escherichia coli

Sedimentation/Siltation

ID17060108CL013b_03	West Fork Rock Creek - T41N, R04W, Sec. 30 to mouth	1.4	MILES

Escherichia coli

Sedimentation/Siltation

ID17060108CL014a_02	East Fork Rock Creek - source to T41N, R 04W, Sec. 29	2.22	MILES

Escherichia coli

Sedimentation/Siltation

ID17060108CL014b_02	East Fork Rock Creek - T41N, R 04W, Sec. 29 to mouth	1.67	MILES

Escherichia coli

Sedimentation/Siltation

ID17060108CL015a_02	Hatter Creek - source to T40N, R04W, Sec. 3	17.3	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL015b_02	Hatter Creek - T40N, R04W, Sec. 3 to mouth	20.47	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL015b_03	Hatter Creek - T40N, R04W, Sec. 3 to mouth	5.23	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060108CL027a_02	Big Creek - source to T42N, R03W, Sec. 08	5.23	MILES

Temperature, water

ID17060108CL027b_02	Big Creek - T42N, R03W, Sec. 08 to mouth	15.49	MILES

Temperature, water

ID17060108CL029_02	Gold Creek - T42N, R04W, Sec. 28 to mouth	1.45	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL029_03	Gold Creek - T42N, R04W, Sec. 28 to mouth	1.78	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL030_02	Gold Creek - source to T42N, R04W, Sec. 28	19.96	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL031a_02	Crane Creek - source to T42N, 04W, Sec. 28	3.71	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL031b_02	Crane Creek - T42N, 04W, Sec. 08 to mouth	6.57	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL032a_02	Deep Creek - source to T42, R05, Sec. 02	23.76	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL032a_03	Deep Creek - source to T42, R05, Sec. 02	0.63	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL032b_02	Deep Creek - T42, R05, Sec. 02 to mouth	15.29	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060108CL032b_03	Deep Creek - T42, R05, Sec. 02 to mouth	6.18	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

PARADISE CREEK **1998-02-12**

ID17060108CL005_02	Paradise Creek - Urban boundary to Idaho/Washington border	6.62	MILES

Ammonia (Un-ionized)

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

Escherichia coli — E. coli is listed as the impairment due to a change in DEQ's water quality standards from a criterion associated with fecal coliform to a more specific criterion for E. coli. Fecal coliform is not removed as a cause since it was the species of concern when this stream was initially listed. NED 04/23/10

ID17060108CL005_02a	Paradise Creek - forest habitat boundary to Urban boundary	22.34	MILES

Ammonia (Un-ionized)

Escherichia coli

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060108CL005_02b	Idlers Rest Creek - source to forest habitat boundary	5.49	MILES

Ammonia (Un-ionized)

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

17060305 South Fork Clearwater TMDL Approval Date

CLEARWATER RIVER (SOUTH FORK) TMDL **2004-07-22**

ID17060305CL001_02	South Fork Clearwater River - Butcher Creek to mouth	25.7	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL001_05	South Fork Clearwater River - Butcher Creek to mouth	12.6	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL010_02	Threemile Creek - source to unnamed tributary	47.67	MILES

Escherichia coli

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060305CL010_03	Threemile Creek - Unnamed tributary to mouth	2.18	MILES

Escherichia coli

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060305CL011_02	Butcher Creek - source to mouth	18.88	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL012_02	South Fork Clearwater River - sidewall tributaries	46.75	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL012_02a	Schwartz Creek	44.47	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL012_05	South Fork Clearwater River - Johns Creek to Butcher Creek	23.17	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL013_02	Mill Creek - source to mouth	36.23	MILES

Temperature, water

ID17060305CL013_03	Mill Creek - 3rd order, from Merton Creek to mouth	8.45	MILES

Temperature, water

ID17060305CL014_02	Johns Creek - tributaries	42.62	MILES

Temperature, water

ID17060305CL014_04	Johns Creek - Gospel Creek to mouth	9.48	MILES

Temperature, water

ID17060305CL015_03	Gospel Creek - source to mouth	1.96	MILES

Temperature, water

ID17060305CL017_02	Johns Creek - Moores Creek to Gospel Creek	15.01	MILES

Temperature, water

ID17060305CL017_03	Johns Creek - Moores Creek to Gospel Creek	3.84	MILES

Temperature, water

ID17060305CL022_02	Huddleson Creek and tributaries	33.91	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL022_02a	Granite Creek	4.08	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL022_05	South Fork Clearwater River - Tenmile Creek to Johns Creek	11.78	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL023_02	Wing Creek - source to Little Wing Creek	9.58	MILES

Temperature, water

ID17060305CL023_03	Wing Creek - Little Wing Creek to mouth	1.41	MILES

Temperature, water

ID17060305CL024_02	Twentymile Creek - 1st and 2nd order mainstem & tributaries	24.75	MILES

Temperature, water

ID17060305CL024_03	Twentymile Creek - unnamed tributary to mouth	3.17	MILES

Temperature, water

ID17060305CL025_02	Tenmile Creek - Sixmile Creek to mouth	2.75	MILES

Temperature, water

ID17060305CL025_04	Tenmile Creek - Sixmile Creek to mouth	3.67	MILES

Temperature, water

ID17060305CL026_02	Tenmile Creek - Williams Creek to Sixmile Creek	12.5	MILES

Temperature, water

ID17060305CL026_03	Tenmile Creek - 3rd order segment	2.45	MILES

Temperature, water

ID17060305CL027_02	Tenmile Creek - source to Williams Creek	21.73	MILES

Temperature, water

ID17060305CL028_02	Williams Creek - source to mouth	11.67	MILES

Temperature, water

ID17060305CL029_02	Sixmile Creek - source to mouth	12.79	MILES

Temperature, water

ID17060305CL029_03	Sixmile Creek - 3rd Order from Fourmile Cr to mouth	1.03	MILES

Temperature, water

ID17060305CL030_02	South Fork Clearwater River - Crooked River to Tenmile Creek	28.39	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL030_05	South Fork Clearwater River - Crooked River to Tenmile Creek	11.76	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL031_02	Crooked River - Relief Creek to mouth	12.45	MILES

Temperature, water

ID17060305CL031_03	Crooked River - 3rd order from Relief Creek to mouth	7.44	MILES

Temperature, water

ID17060305CL032_02	Crooked River - confluence of West and East Fork Crooked R.	29.48	MILES

Temperature, water

ID17060305CL032_03	Crooked River - WF and EF Crooked R. to Relief Creek	4.21	MILES

Temperature, water

ID17060305CL033_02	West Fork Crooked River - source to mouth	13.51	MILES

Temperature, water

ID17060305CL034_02	East Fork Crooked River - source to mouth	12	MILES

Temperature, water

ID17060305CL035_02	Relief Creek - source to mouth	13.46	MILES

Temperature, water

ID17060305CL036_02	South Fork Clearwater River - tributaries	2.49	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL036_05	South Fork Clearwater River - 5th order mainstem segment	3.96	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL037_02	Red River- Siegel Creek to mouth	17.13	MILES

Temperature, water

ID17060305CL037_04	Red River- Siegel Creek to mouth	7.82	MILES

Temperature, water

ID17060305CL038_02	Red River - South Fork Red River to Siegel Creek	27.12	MILES

Temperature, water

ID17060305CL038_02a	Little Moose Creek - source to mouth	8.88	MILES

Temperature, water

ID17060305CL038_04	Red River - South Fork Red River to Siegel Creek	7.62	MILES

Temperature, water

ID17060305CL039_02	Moose Butte Creek - source to, and including Hays Cr.	12.52	MILES

Temperature, water

ID17060305CL039_03	Moose Butte Creek - 3rd order segment	2.64	MILES

Temperature, water

ID17060305CL040_02	South Fork Red River - Trapper Creek to mouth	3.38	MILES

Temperature, water

ID17060305CL040_03	South Fork Red River - Trapper Creek to mouth	3.02	MILES

Temperature, water

ID17060305CL041_02	South Fork Red River - West Fork Red River to Trapper Creek	4.11	MILES

Temperature, water

ID17060305CL041_03	South Fork Red River - West Fork Red River to Trapper Creek	3.74	MILES

Temperature, water

ID17060305CL042_02	West Fork Red River - source to mouth	14.14	MILES

Temperature, water

ID17060305CL042_03	West Fork Red River - source to mouth	0.74	MILES

Temperature, water

ID17060305CL043_02	South Fork Red River - source to West Fork Red River	7.91	MILES

Temperature, water

ID17060305CL044_02	Trapper Creek - source to mouth	13.83	MILES

Temperature, water

ID17060305CL045_02	Red River - source to South Fork Red River	32.48	MILES

Temperature, water

ID17060305CL045_03	Red River - Unnamed tributary to South Fork Red River	10.89	MILES

Temperature, water

ID17060305CL046_02	Soda Creek - source to mouth	7.95	MILES
Temperature, water			
ID17060305CL047_02	Bridge Creek - source to mouth	7.18	MILES
Temperature, water			
ID17060305CL048_02	Otterson Creek - source to mouth	6.17	MILES
Temperature, water			
ID17060305CL049_02	Trail Creek - source to mouth	9.37	MILES
Temperature, water			
ID17060305CL050_02	Siegel Creek - source to mouth	13.61	MILES
Temperature, water			
ID17060305CL051_02	Red Horse Creek - source to mouth	14.03	MILES
Temperature, water			
ID17060305CL052_02	American River - East Fork American River to mouth	10.6	MILES
Temperature, water			
ID17060305CL052_04	American River - 4th order,East Fork American River to mouth	9.47	MILES
Temperature, water			
ID17060305CL053_02	Kirks Fork - source to mouth	15.75	MILES
Temperature, water			
ID17060305CL053_03	Kirks Fork - 3rd order segment	1.3	MILES
Temperature, water			
ID17060305CL054_02	East Fork American River - source to mouth	30.97	MILES
Temperature, water			
ID17060305CL054_03	East Fork American River - source to mouth	2.13	MILES
Temperature, water			
ID17060305CL055_02	American River - source to East Fork American River	33.69	MILES
Temperature, water			
ID17060305CL055_03	American River - source to East Fork American River	5.62	MILES
Temperature, water			
ID17060305CL056_02	Elk Creek - confluence of Big Elk and Little Elk Creeks to m	2.04	MILES
Temperature, water			
ID17060305CL056_03	Elk Creek-confluence of Big Elk & Little Elk Creeks to mouth	2.35	MILES
Temperature, water			
ID17060305CL057_02	Little Elk Creek - source to mouth	12.68	MILES
Temperature, water			

ID17060305CL058_02	Big Elk Creek - source to WF Big Elk Creek	15.34	MILES

Temperature, water

ID17060305CL058_03	Big Elk Creek - 3rd Order	4.36	MILES

Temperature, water

ID17060305CL059_02	Buffalo Gulch - source to mouth	6.49	MILES

Temperature, water

ID17060305CL060_02	Whiskey Creek - source to mouth	4.2	MILES

Temperature, water

ID17060305CL061_02	Maurice Creek - source to mouth	2.64	MILES

Temperature, water

ID17060305CL062_02	Newsome Creek - Beaver Creek to mouth	5.5	MILES

Temperature, water

ID17060305CL062_04	Newsome Creek - Beaver Creek to mouth	6.92	MILES

Temperature, water

ID17060305CL063_02	Bear Creek - source to mouth	8.01	MILES

Temperature, water

ID17060305CL064_02	Nugget Creek - source to mouth	4.55	MILES

Temperature, water

ID17060305CL065_02	Beaver Creek - source to mouth	6.66	MILES

Temperature, water

ID17060305CL066_04	Newsome Creek - 4th order	2.26	MILES

Temperature, water

ID17060305CL067_02	Mule Creek - source to mouth	13.2	MILES

Temperature, water

ID17060305CL067_03	Mule Creek - 3rd Order	0.57	MILES

Temperature, water

ID17060305CL068_02	Newsome Creek - source to Mule Creek	15.2	MILES

Temperature, water

ID17060305CL068_03	Newsome Creek - source to Mule Creek	0.48	MILES

Temperature, water

ID17060305CL069_02	Haysfork Creek - source to mouth	9.5	MILES

Temperature, water

ID17060305CL070_02	Baldy Creek - source to mouth	8.02	MILES

Temperature, water

ID17060305CL071_02	Pilot Creek - source to mouth	7.6	MILES
Temperature, water			
ID17060305CL071_03	Pilot Creek - 3rd Order	2.84	MILES
Temperature, water			
ID17060305CL072_02	Sawmill Creek - source to mouth	6.02	MILES
Temperature, water			
ID17060305CL073_02	Sing Lee Creek - source to mouth	4.51	MILES
Temperature, water			
ID17060305CL074_02	West Fork Newsome Creek - source to mouth	4.25	MILES
Temperature, water			
ID17060305CL074_02a	West Fork Newsome Creek	2.95	MILES
Temperature, water			
ID17060305CL075_02	Leggett Creek - source to mouth	11.86	MILES
Temperature, water			
ID17060305CL076_02	Fall Creek - source to mouth	7.77	MILES
Temperature, water			
ID17060305CL077_02	Silver Creek - 1st and 2nd order	9.6	MILES
Temperature, water			
ID17060305CL077_02a	Silver Creek - headwaters and tributaries	29.49	MILES
Temperature, water			
ID17060305CL077_03	Silver Creek - unnamed tributary to mouth	1.87	MILES
Temperature, water			
ID17060305CL078_02	Peasley Creek - source to mouth	22.28	MILES
Temperature, water			
ID17060305CL079_02	Cougar Creek - source to mouth	17.05	MILES
Temperature, water			
ID17060305CL080_02	Meadow Creek - source to and inc. NF Meadow Cr.	41.01	MILES
Temperature, water			
ID17060305CL080_03	Meadow Creek - NF Meadow Cr to mouth	6.76	MILES
Temperature, water			
ID17060305CL081_02	Sally Ann Creek - source to and inc. Wall Creek	17.74	MILES
Temperature, water			
ID17060305CL081_03	Sally Ann Creek - Wall Creek to mouth	0.6	MILES
Temperature, water			

ID17060305CL082_02	Rabbit Creek - source to mouth	11.17	MILES

Temperature, water

CLEARWATER RIVER, SOUTH FORK (NEZ PERCE RESERVATION LANDS) TMDL 2004-07-22

ID17060305CL001_02	South Fork Clearwater River - Butcher Creek to mouth	25.7	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL001_05	South Fork Clearwater River - Butcher Creek to mouth	12.6	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL010_02	Threemile Creek - source to unnamed tributary	47.67	MILES

Escherichia coli

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060305CL010_03	Threemile Creek - Unnamed tributary to mouth	2.18	MILES

Escherichia coli

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060305CL011_02	Butcher Creek - source to mouth	18.88	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL012_05	South Fork Clearwater River - Johns Creek to Butcher Creek	23.17	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL013_02	Mill Creek - source to mouth	36.23	MILES

Temperature, water

ID17060305CL013_03	Mill Creek - 3rd order, from Merton Creek to mouth	8.45	MILES

Temperature, water

ID17060305CL014_02	Johns Creek - tributaries	42.62	MILES

Temperature, water

ID17060305CL014_04	Johns Creek - Gospel Creek to mouth	9.48	MILES

Temperature, water

ID17060305CL015_03	Gospel Creek - source to mouth	1.96	MILES

Temperature, water

ID17060305CL017_02	Johns Creek - Moores Creek to Gospel Creek	15.01	MILES

Temperature, water

ID17060305CL017_03	Johns Creek - Moores Creek to Gospel Creek	3.84	MILES

Temperature, water

ID17060305CL022_02	Huddleson Creek and tributaries	33.91	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL022_02a	Granite Creek	4.08	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL022_05	South Fork Clearwater River - Tenmile Creek to Johns Creek	11.78	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL023_02	Wing Creek - source to Little Wing Creek	9.58	MILES

Temperature, water

ID17060305CL023_03	Wing Creek - Little Wing Creek to mouth	1.41	MILES

Temperature, water

ID17060305CL024_02	Twentymile Creek - 1st and 2nd order mainstem & tributaries	24.75	MILES

Temperature, water

ID17060305CL024_03	Twentymile Creek - unnamed tributary to mouth	3.17	MILES

Temperature, water

ID17060305CL025_02	Tenmile Creek - Sixmile Creek to mouth	2.75	MILES

Temperature, water

ID17060305CL025_04	Tenmile Creek - Sixmile Creek to mouth	3.67	MILES

Temperature, water

ID17060305CL026_02	Tenmile Creek - Williams Creek to Sixmile Creek	12.5	MILES

Temperature, water

ID17060305CL026_03	Tenmile Creek - 3rd order segment	2.45	MILES

Temperature, water

ID17060305CL027_02	Tenmile Creek - source to Williams Creek	21.73	MILES

Temperature, water

ID17060305CL028_02	Williams Creek - source to mouth	11.67	MILES

Temperature, water

ID17060305CL029_02	Sixmile Creek - source to mouth	12.79	MILES

Temperature, water

ID17060305CL029_03	Sixmile Creek - 3rd Order from Fourmile Cr to mouth	1.03	MILES

Temperature, water

ID17060305CL030_02	South Fork Clearwater River - Crooked River to Tenmile Creek	28.39	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL030_05	South Fork Clearwater River - Crooked River to Tenmile Creek	11.76	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL031_02	Crooked River - Relief Creek to mouth	12.45	MILES

Temperature, water

ID17060305CL031_03	Crooked River - 3rd order from Relief Creek to mouth	7.44	MILES

Temperature, water

ID17060305CL032_02	Crooked River - confluence of West and East Fork Crooked R.	29.48	MILES

Temperature, water

ID17060305CL032_03	Crooked River - WF and EF Crooked R. to Relief Creek	4.21	MILES

Temperature, water

ID17060305CL033_02	West Fork Crooked River - source to mouth	13.51	MILES

Temperature, water

ID17060305CL034_02	East Fork Crooked River - source to mouth	12	MILES

Temperature, water

ID17060305CL035_02	Relief Creek - source to mouth	13.46	MILES

Temperature, water

ID17060305CL036_02	South Fork Clearwater River - tributaries	2.49	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL036_05	South Fork Clearwater River - 5th order mainstem segment	3.96	MILES

Sedimentation/Siltation

Temperature, water

ID17060305CL037_02	Red River- Siegel Creek to mouth	17.13	MILES

Temperature, water

ID17060305CL037_04	Red River- Siegel Creek to mouth	7.82	MILES

Temperature, water

ID17060305CL038_02	Red River - South Fork Red River to Siegel Creek	27.12	MILES

Temperature, water

ID17060305CL038_02a	Little Moose Creek - source to mouth	8.88	MILES

Temperature, water

ID17060305CL039_02	Moose Butte Creek - source to, and including Hays Cr.	12.52	MILES

Temperature, water

ID17060305CL039_03	Moose Butte Creek - 3rd order segment	2.64	MILES

Temperature, water

ID17060305CL040_02	South Fork Red River - Trapper Creek to mouth	3.38	MILES

Temperature, water

ID17060305CL040_03	South Fork Red River - Trapper Creek to mouth	3.02	MILES

Temperature, water

ID17060305CL041_02	South Fork Red River - West Fork Red River to Trapper Creek	4.11	MILES

Temperature, water

ID17060305CL041_03	South Fork Red River - West Fork Red River to Trapper Creek	3.74	MILES

Temperature, water

ID17060305CL042_02	West Fork Red River - source to mouth	14.14	MILES

Temperature, water

ID17060305CL042_03	West Fork Red River - source to mouth	0.74	MILES

Temperature, water

ID17060305CL043_02	South Fork Red River - source to West Fork Red River	7.91	MILES

Temperature, water

ID17060305CL044_02	Trapper Creek - source to mouth	13.83	MILES

Temperature, water

ID17060305CL045_02	Red River - source to South Fork Red River	32.48	MILES

Temperature, water

ID17060305CL045_03	Red River - Unnamed tributary to South Fork Red River	10.89	MILES

Temperature, water

ID17060305CL046_02	Soda Creek - source to mouth	7.95	MILES

Temperature, water

ID17060305CL047_02	Bridge Creek - source to mouth	7.18	MILES
Temperature, water			
ID17060305CL048_02	Otterson Creek - source to mouth	6.17	MILES
Temperature, water			
ID17060305CL049_02	Trail Creek - source to mouth	9.37	MILES
Temperature, water			
ID17060305CL050_02	Siegel Creek - source to mouth	13.61	MILES
Temperature, water			
ID17060305CL051_02	Red Horse Creek - source to mouth	14.03	MILES
Temperature, water			
ID17060305CL052_02	American River - East Fork American River to mouth	10.6	MILES
Temperature, water			
ID17060305CL052_04	American River - 4th order,East Fork American River to mouth	9.47	MILES
Temperature, water			
ID17060305CL053_02	Kirks Fork - source to mouth	15.75	MILES
Temperature, water			
ID17060305CL053_03	Kirks Fork - 3rd order segment	1.3	MILES
Temperature, water			
ID17060305CL054_02	East Fork American River - source to mouth	30.97	MILES
Temperature, water			
ID17060305CL054_03	East Fork American River - source to mouth	2.13	MILES
Temperature, water			
ID17060305CL055_02	American River - source to East Fork American River	33.69	MILES
Temperature, water			
ID17060305CL056_02	Elk Creek - confluence of Big Elk and Little Elk Creeks to m	2.04	MILES
Temperature, water			
ID17060305CL056_03	Elk Creek-confluence of Big Elk & Little Elk Creeks to mouth	2.35	MILES
Temperature, water			
ID17060305CL057_02	Little Elk Creek - source to mouth	12.68	MILES
Temperature, water			
ID17060305CL058_02	Big Elk Creek - source to WF Big Elk Creek	15.34	MILES
Temperature, water			
ID17060305CL058_03	Big Elk Creek - 3rd Order	4.36	MILES
Temperature, water			

ID17060305CL059_02	Buffalo Gulch - source to mouth	6.49	MILES

Temperature, water

ID17060305CL060_02	Whiskey Creek - source to mouth	4.2	MILES

Temperature, water

ID17060305CL061_02	Maurice Creek - source to mouth	2.64	MILES

Temperature, water

ID17060305CL062_02	Newsome Creek - Beaver Creek to mouth	5.5	MILES

Temperature, water

ID17060305CL062_04	Newsome Creek - Beaver Creek to mouth	6.92	MILES

Temperature, water

ID17060305CL064_02	Nugget Creek - source to mouth	4.55	MILES

Temperature, water

ID17060305CL065_02	Beaver Creek - source to mouth	6.66	MILES

Temperature, water

ID17060305CL066_04	Newsome Creek - 4th order	2.26	MILES

Temperature, water

ID17060305CL067_02	Mule Creek - source to mouth	13.2	MILES

Temperature, water

ID17060305CL067_03	Mule Creek - 3rd Order	0.57	MILES

Temperature, water

ID17060305CL068_02	Newsome Creek - source to Mule Creek	15.2	MILES

Temperature, water

ID17060305CL068_03	Newsome Creek - source to Mule Creek	0.48	MILES

Temperature, water

ID17060305CL069_02	Haysfork Creek - source to mouth	9.5	MILES

Temperature, water

ID17060305CL070_02	Baldy Creek - source to mouth	8.02	MILES

Temperature, water

ID17060305CL071_02	Pilot Creek - source to mouth	7.6	MILES

Temperature, water

ID17060305CL071_03	Pilot Creek - 3rd Order	2.84	MILES

Temperature, water

ID17060305CL072_02	Sawmill Creek - source to mouth	6.02	MILES

Temperature, water

ID17060305CL073_02	Sing Lee Creek - source to mouth	4.51	MILES

Temperature, water

ID17060305CL074_02	West Fork Newsome Creek - source to mouth	4.25	MILES

Temperature, water

ID17060305CL074_02a	West Fork Newsome Creek	2.95	MILES

Temperature, water

ID17060305CL075_02	Leggett Creek - source to mouth	11.86	MILES

Temperature, water

ID17060305CL076_02	Fall Creek - source to mouth	7.77	MILES

Temperature, water

ID17060305CL077_02	Silver Creek - 1st and 2nd order	9.6	MILES

Temperature, water

ID17060305CL077_02a	Silver Creek - headwaters and tributaries	29.49	MILES

Temperature, water

ID17060305CL077_03	Silver Creek - unnamed tributary to mouth	1.87	MILES

Temperature, water

ID17060305CL079_02	Cougar Creek - source to mouth	17.05	MILES

Temperature, water

ID17060305CL080_02	Meadow Creek - source to and inc. NF Meadow Cr.	41.01	MILES

Temperature, water

ID17060305CL081_02	Sally Ann Creek - source to and inc. Wall Creek	17.74	MILES

Temperature, water

ID17060305CL081_03	Sally Ann Creek - Wall Creek to mouth	0.6	MILES

Temperature, water

ID17060305CL082_02	Rabbit Creek - source to mouth	11.17	MILES

Temperature, water

COTTONWOOD CREEK **2000-06-06**

ID17060305CL002_02	Cottonwood Creek - Cottonwood Creek waterfall (9.0 miles up	24.33	MILES

Ammonia (Un-ionized)

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL002_04	Cottonwood Creek - 4th order; waterfall to mouth	9.13	MILES

Ammonia (Un-ionized)

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL003_02	Cottonwood Creek - source to Cottonwood Creek waterfall	39.22	MILES

Ammonia (Un-ionized)

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL003_03	Cottonwood Creek - source to Cottonwood Creek waterfall	0.39	MILES

Ammonia (Un-ionized)

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL003_04	Cottonwood Creek - source to Cottonwood Creek waterfall	7.54	MILES

Ammonia (Un-ionized)

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL004_02	Red Rock Creek - Red Rock Creek waterfall to mouth	2.13	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL004_03	Red Rock Creek - Red Rock Creek waterfall to mouth	3.34	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL005_02	Red Rock Creek - source to Red Rock Creek waterfall	49.9	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL005_03	Red Rock Creek - source to Red Rock Creek waterfall	3.48	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL006_02	Stockney Creek - source to mouth	45.36	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL006_03	Stockney Creek - source to mouth	7.49	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

Oxygen, Dissolved Added 3/27/2006

ID17060305CL007_02	Shebang Creek - source to mouth	34.33	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL007_03	Shebang Creek - source to mouth	7.72	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL008_02	South Fork Cottonwood Creek - source to mouth	24.98	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL008_03	South Fork Cottonwood Creek - 3rd order segment	5.02	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060305CL009_02	Long Haul Creek - source to mouth	14.99	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

17060306 Clearwater TMDL Approval Date

JIM FORD CREEK 2000-06-06

ID17060306CL034_04	Jim Ford Creek - waterfall (12.5 miles upstream) to mouth.	12.21	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060306CL035_02	Heywood, Wilson Creeks and tributaries	48.63	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060306CL035_03	Jim Ford Creek - source to Jim Ford Cr waterfall (12.5 mi)	6.39	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060306CL035_04	Jim Ford Creek - source to Jim Ford Creek waterfall (12.5 mi	3.87	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators	The nutrient and dissolved oxygen TMDLs were combined. An assumption was made that by meeting the instream nutrient target the dissolved oxygen water quality standard will be achieved as well.

ID17060306CL036_02	Grasshopper Creek - source to mouth	19.57	MILES

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060306CL036_03	Grasshopper Creek - source to mouth	4.3	MILES

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060306CL037_03	Winter Creek - waterfall (3.4 miles upstream) to mouth	2.41	MILES

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators	The nutrient and dissolved oxygen TMDLs were combined. An assumption was made that by meeting the instream nutrient target the dissolved oxygen water quality standard will be achieved as well.

ID17060306CL038_02	Winter Creek - source to Winter Cr waterfall (3.4 miles upst	6.77	MILES

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

LINDSAY CREEK WATERSHED TMDL 2007-06-26

ID17060306CL003_02	Lindsay Creek - source to mouth	23.36	MILES

Escherichia coli

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

ID17060306CL003_03	Lindsay Creek - source to mouth	3.64	MILES

Escherichia coli

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

POTLATCH RIVER TMDLS 2009-02-13

ID17060306CL044_06	Potlatch River - 6th Order	16.36	MILES

Sedimentation/Siltation

Temperature, water

ID17060306CL045_05	Potlatch River - 5th Order	18.48	MILES

Temperature, water

ID17060306CL046_04	Cedar Creek - 4th Order	5.18	MILES

Sedimentation/Siltation

Temperature, water

ID17060306CL047_03	Boulder Creek - 3rd Order	4.14	MILES

Escherichia coli

Temperature, water

ID17060306CL048_04	Potlatch River - 4th Order	6.66	MILES

Temperature, water

ID17060306CL048_05	Potlatch River - 5th Order	7.7	MILES

Temperature, water

ID17060306CL049_02	Potlatch River - headwaters	61.68	MILES

Escherichia coli

Temperature, water

ID17060306CL049_03	Potlatch River - 3rd Order	5.3	MILES

Temperature, water

Escherichia coli — Measured in-stream E. coli bacteria geometric mean concentrations for this assssment unit was 289 cfu/100 ml.
page 37, CB 1/10.

ID17060306CL049_04	Potlatch River - 4th Order	3.71	MILES

Escherichia coli

Temperature, water

ID17060306CL051_04	East Fork Potlatch River - 4th Order	4.73	MILES

Temperature, water

ID17060306CL052_03	Ruby Creek - 3rd Order	2.14	MILES

Escherichia coli

Temperature, water

ID17060306CL053_02	Moose Creek - headwaters	15.72	MILES

Escherichia coli

Temperature, water

ID17060306CL053_03	Moose Creek - 3rd Order	5.08	MILES

Escherichia coli

Temperature, water

ID17060306CL054_02	Corral Creek - headwaters	22.29	MILES

Temperature, water

ID17060306CL054_03	Corral Creek - 3rd Order	7.57	MILES

Temperature, water

ID17060306CL055_02	Pine Creek - headwaters	35.97	MILES

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060306CL055_03	Pine Creek - 3rd Order	3.87	MILES

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060306CL056_04	Big Bear Creek - 4th Order	17.06	MILES

Escherichia coli

Temperature, water

ID17060306CL056_05	Big Bear Creek - 5th Order	1.01	MILES

Escherichia coli

Temperature, water

ID17060306CL061_02	West Fork Little Bear Creek - 1st and 2nd Order	38.52	MILES

Escherichia coli

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

ID17060306CL061_03	West Fork Little Bear Creek - 3rd Order	9.22	MILES

Escherichia coli

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

ID17060306CL062_02	Middle Potlatch Creek - headwaters	45.85	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060306CL062_03	Middle Potlatch Creek - 3rd Order	14.47	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

WINCHESTER LAKE 1999-03-22

ID17060306CL009_03	Lapwai Lake	86.49	ACRES

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

ID17060306CL010_02	Lapwai Creek - source to Winchester Lake	13.84	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators   Nutrient Suspected Impairment

ID17060306CL010_03	Lapwai Creek - source to Winchester Lake	1.31	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

17060307 Upper North Fork Clearwater TMDL Approval Date

CLEARWATER RIVER, UPPER NORTH FORK 2003-12-09

ID17060307CL001_02a	Sneak Creek - source to mouth	5.38	MILES

Temperature, water

ID17060307CL003_02a	Tumble Creek - source to mouth	4.59	MILES

Temperature, water

ID17060307CL005_02	Orogrande Creek - 1st and 2nd order tributaries	28.97	MILES

Temperature, water

ID17060307CL005_02a	Tamarack Creek - source to mouth	5.66	MILES

Temperature, water

ID17060307CL005_04	Orogrande Creek - 4th Order	12.59	MILES

Temperature, water

ID17060307CL006_02	Orogrande Creek - headwaters	36.82	MILES

Temperature, water

ID17060307CL006_03	Orogrande Creek - 3rd Order	4.04	MILES

Temperature, water

ID17060307CL007_02a	Sylvan Creek - source to mouth	5.72	MILES

Temperature, water

ID17060307CL012_02	Middle Creek - tributaries	18.24	MILES

Temperature, water

ID17060307CL012_02a	Middle Creek - headwaters	8.46	MILES

Temperature, water

ID17060307CL012_03	Middle Creek - 3rd Order	2.04	MILES

Temperature, water

ID17060307CL012_03a	Middle Creek	5.55	MILES

Temperature, water

ID17060307CL021_02	Gravey Creek - source to mouth	19.12	MILES

Temperature, water

ID17060307CL021_02a	Marten Creek - source to mouth	7.56	MILES

Temperature, water

ID17060307CL021_02b	Grass Creek - source to mouth	1.65	MILES

Temperature, water

ID17060307CL021_03	Gravey Creek - 3rd Order	2.57	MILES

Temperature, water

ID17060307CL021_03a	Gravey Creek - 3rd Order	1.64	MILES

Temperature, water

ID17060307CL030_02	Osier Creek - source to mouth	18.92	MILES

Temperature, water

ID17060307CL030_02a	Osier Creek Tributaries:	13.75	MILES

Temperature, water

ID17060307CL030_03	Osier Creek - 3rd Order	3.88	MILES

Temperature, water

ID17060307CL032_02a	Deception Gulch Creek - source to mouth	6.38	MILES

Sedimentation/Siltation

Temperature, water

ID17060307CL040_02	Cold Springs Creek - source to mouth	11.26	MILES

Temperature, water

ID17060307CL044_02a	Grizzly Creek - source to mouth	4.54	MILES

Temperature, water

ID17060307CL045_02	Cougar Creek - source to mouth	5.9	MILES

Temperature, water

17060308 Lower North Fork Clearwater TMDL Approval Date

CLEARWATER RIVER SUBBASIN, LOWER NORTH FORK 2003-01-15

ID17060308CL002_02a	Swamp Creek - 1st and 2nd Order Tributaries	12.74	MILES

Sedimentation/Siltation

Temperature, water

ID17060308CL002_02d	Cedar Creek - source to mouth	6.22	MILES

Temperature, water

ID17060308CL002_03a	Swamp Creek - 3rd order, Follet Creek to Dworshak Reservoir	0.72	MILES

Sedimentation/Siltation

Temperature, water

ID17060308CL002_04	Elk Creek - Cedar Creek to Dworshak Reservoir	8.34	MILES

Temperature, water

ID17060308CL002_04a	Long Meadow Creek - un-named trib to Dworshak Reservoir	1.45	MILES

Sedimentation/Siltation

Temperature, water

Escherichia coli A bacteria grab sample was taken from this assessment unit in 1999. E. coli results = 2/100 mls.

ID17060308CL003_02	Gold Creek, Meadow Creek, unnamed tributary	29.71	MILES

Sedimentation/Siltation

ID17060308CL003_03	Reeds Creek - Alder Creek to Gold Creek	3.35	MILES

Sedimentation/Siltation

ID17060308CL003_04	Reeds Creek - Gold Creek to unnamed tributary	1.85	MILES

Sedimentation/Siltation

ID17060308CL004_02	Reeds Creek - source to Deer Creek, inc. tribs	29.23	MILES

Sedimentation/Siltation

ID17060308CL004_03	Reeds Creek - Deer Creek to Alder Creek	8.05	MILES

Sedimentation/Siltation

ID17060308CL020_04a	Breakfast Creek - 4th Order, Stony Cr to Dworshak Reservoir	1.91	MILES

Sedimentation/Siltation

ID17060308CL025_02	Breakfast Creek - source to Stony Creek	10.04	MILES

Sedimentation/Siltation

ID17060308CL028_02	Swamp Creek - source to Dworshak Reservoir	1.79	MILES

Sedimentation/Siltation

Temperature, water

ID17060308CL028_03	Swamp Creek - source to Dworshak Reservoir	3	MILES

Sedimentation/Siltation

Temperature, water

ID17060308CL029_02	Cranberry Creek - source to Dworshak Reservoir	14.25	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060308CL030_02d	Partridge Creek - source to mouth	6.88	MILES

Sedimentation/Siltation

ID17060308CL030_02e	Deep Creek, Fisher Creek, and tributaries	33.31	MILES

Temperature, water

ID17060308CL030_03a	Elk Creek - 3rd Order, Reservoir to Elk Creek Falls	7.57	MILES

Temperature, water

ID17060308CL030_03b	Elk Creek - Elk Creek Falls to conflence of Deep Creek	4.5	MILES

Temperature, water

ID17060308CL030_04	Elk Creek - confluence of Deep Creek to Cedar Creek	3.66	MILES

Temperature, water

ID17060308CL034_02	Three Bear, Round Meadow, Oviatt Creeks and tributaries	58.48	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060308CL034_02a	Long Meadow Creek	1.2	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060308CL034_03	Long Meadow Creek - 3rd Order	7.7	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060308CL034_04	Long Meadow Creek - 4th Order	4.4	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Panhandle

17010104 Lower Kootenai TMDL Approval Date

KOOTENAI RIVER AND MOYIE RIVER SUBBASIN TMDLS 2007-02-06

ID17010104PN002_02	Boundary Cr & tribs - ID/Canada border to ID/Canada border	16.93	MILES

Temperature, water

ID17010104PN002_03	Boundary Creek - Idaho/Canadian border to Id/Canadian borde	7.62	MILES

Temperature, water

ID17010104PN006_02	Cow Creek - headwaters to Smith Creek	9.49	MILES

Sedimentation/Siltation

ID17010104PN006_03	Cow Creek - source to mouth	2.16	MILES

Sedimentation/Siltation

ID17010104PN015_04	Lower Deep Creek - Snow Creek to Kootenai River	4.31	MILES

Sedimentation/Siltation

Temperature, water

Sedimentation/Siltation — Suspended Solids impairment is a hold over from 1998 303d list, removed in 2004.

ID17010104PN018_04	Deep Creek - Ruby Creek to Snow Creek	4.91	MILES

Sedimentation/Siltation

Temperature, water

ID17010104PN019_04	Deep Creek - Trail Creek to Brown Creek	4.63	MILES

Sedimentation/Siltation

Temperature, water

ID17010104PN022_03	Deep Creek - McArthur Lake to Trail Creek	6.58	MILES

Sedimentation/Siltation

Temperature, water

ID17010104PN025_02	Deep Creek - source to McArthur Lake	9.38	MILES

Temperature, water

17010213 Lower Clark Fork TMDL Approval Date

LOWER CLARK RIVER SUBBASIN TMDLS 2007-10-22

ID17010213PN001_08	Clark Fork River Delta - Mosquito Creek to Pend Oreille Lake	11.27	MILES

Cadmium

Copper

Zinc

Dissolved Gas Supersaturation

ID17010213PN002_02	Johnson Creek - source to mouth	15.31	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN002_03	Johnson Creek - source to mouth	2.12	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN003_08	Clark Fork River - Cabinet Gorge Dam to Mosquito Creek	9.8	MILES

Cadmium

Copper

Zinc

Dissolved Gas Supersaturation

ID17010213PN004_02	Twin Creek - 1st & 2nd order Twin & Delyle Creek	13.94	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN004_02a	Dry Creek	9.64	MILES

Temperature, water

ID17010213PN004_03	Twin Creek - Delyle Creek to Clark Fork River	3.45	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN005_08	Clark Fork River - Idaho/Montana border to Cabinet Gorge Da	0.55	MILES

Cadmium

Copper

Zinc

Dissolved Gas Supersaturation

ID17010213PN009_02	Mosquito Creek - source to mouth	8.77	MILES

Temperature, water

ID17010213PN010_04	Lightning Creek - Spring Creek to mouth	1.51	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN011_02	Lightning Creek - Cascade Creek to Spring Creek	0.222	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN011_04	Lightning Creek - Cascade Creek to Spring Creek	2.66	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN012_02	Cascade Creek - source to mouth	7.39	MILES

Temperature, water

ID17010213PN013_02	Lightning Creek - East Fork Creek to Cascade Creek	6.8	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN013_04	Lightning Creek - East Fork Creek to Cascade Creek	6.87	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN014_02	East Fork Creek - Idaho/Montana border to mouth	5.24	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN014_03	East Fork Creek - Idaho/Montana border to mouth	0.92	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN015_02	Savage Creek - Idaho/Montana border to mouth	2.85	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN016_02	Tribs. to Lightning Cr between Wellington & E. Fork Cr	15.18	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN016_03	Lightning Creek - Wellington Creek to East Fork Creek	4.78	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN017_02	Lightning Creek - tribs between Wellington & Rattle Cr	2.78	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN017_03	Lightning Creek - Rattle Creek to Wellington Creek	2.72	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN018_02	Rattle Creek - source to mouth	10.41	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN019_02	Lightning Creek - source to Rattle Creek	18.37	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN019_03	Lightning Creek - source to Rattle Creek	2.13	MILES

Sedimentation/Siltation

Temperature, water

ID17010213PN020_02	Wellington Creek - source to mouth	7.91	MILES

Sedimentation/Siltation

Temperature, water

17010214 Pend Oreille Lake TMDL Approval Date

CLARK FORK/PEND OREILLE BASIN **2000-09-14**

ID17010214PN003_02	Hoodoo Creek - source to mouth	51.84	MILES

Sedimentation/Siltation — TMDL completed and approved for AU-Pollutant combination in 2000. Hoodoo Creek discussion and sediment load calculations can be found on pages 152 through 157 of TMDL.

ID17010214PN003_02a	Hoodoo Creek	15.68	MILES

Sedimentation/Siltation

ID17010214PN012_02	Cocolalla Creek - Cocolalla Lake to mouth	13.3	MILES

Sedimentation/Siltation

ID17010214PN012_04	Cocolalla Creek - Cocolalla Lake to mouth	7.69	MILES

Sedimentation/Siltation

ID17010214PN013L_0L	Cocolalla Lake	803.09	ACRES

Oxygen, Dissolved

Phosphorus (Total)

ID17010214PN014_02	Cocolalla Creek - source to Cocolalla Lake	40.66	MILES

Sedimentation/Siltation

ID17010214PN014_03	Cocolalla Creek - source to Cocolalla Lake	9.2	MILES

Sedimentation/Siltation

ID17010214PN015_02	Fish Creek - source to mouth	15.27	MILES

Sedimentation/Siltation

ID17010214PN015_03	Fish Creek - source to mouth	2.37	MILES

Sedimentation/Siltation

ID17010214PN018L_0L	Pend Oreille Lake	80827.85	ACRES

Phosphorus (Total)

ID17010214PN021_02	Cheer Creek	4.63	MILES

Sedimentation/Siltation

ID17010214PN021_03	Gold Crk.- WGold to lake PDO	1.67	MILES

Sedimentation/Siltation

ID17010214PN023_02	Gold Creek, headwaters to chloride gulch	6.92	MILES

Sedimentation/Siltation

ID17010214PN023_03	Gold Creek	1.16	MILES

Sedimentation/Siltation

ID17010214PN024_02	Chloride Creek	7.14	MILES

Sedimentation/Siltation

ID17010214PN031_04	Lower Pack River - Sand Creek to mouth	19.2	MILES

Sedimentation/Siltation

ID17010214PN032_02	Trout Creek	10.13	MILES

Sedimentation/Siltation

ID17010214PN034_02	Gold Creek - headwaters to Pack R	17.8	MILES

Sedimentation/Siltation

ID17010214PN035_02	Grouse Creek - tributaries to Grouse Cr.	3.34	MILES

Sedimentation/Siltation

ID17010214PN035_03	Grouse Creek - North Fork Grouse Creek to Pack R.	9.4	MILES

Sedimentation/Siltation

ID17010214PN036_02	Grouse Creek - 1st and 2nd order tribs above NF Grouse Cr	28.57	MILES

Sedimentation/Siltation

ID17010214PN036_03	Grouse Creek - Flume Cr to North Fork Grouse Cr	6.81	MILES

Sedimentation/Siltation

ID17010214PN037_02	North Fork Grouse Creek - headwaters to Grouse Cr	16.69	MILES

Sedimentation/Siltation

ID17010214PN038_02	Sand Creek - headwaters to Pack R	13.21	MILES

Sedimentation/Siltation

ID17010214PN039_02	Upper Pack River - tribs between Lindsey Cr and Sand Cr	15	MILES

Sedimentation/Siltation

ID17010214PN039_03	Upper Pack River - Hellroaring Cr to Colburn Cr	8.33	MILES

Sedimentation/Siltation

ID17010214PN039_04	Upper Pack River - Colburn Cr to Sand Creek	3.8	MILES

Sedimentation/Siltation

ID17010214PN043_02	Jeru Creek - source to mouth	6.33	MILES

Sedimentation/Siltation

ID17010214PN045_02	Caribou Creek - Headwaters to Pack R.	16.97	MILES

Sedimentation/Siltation

ID17010214PN046_02	Berry Creek - headwaters to Colburn Cr.	13.58	MILES

Sedimentation/Siltation

ID17010214PN046_03	Colburn Cr, Berry Cr to Pack R	0.36	MILES

Sedimentation/Siltation

ID17010214PN047_02	Colburn Creek - Headwaters to Berry Cr.	8.61	MILES

Sedimentation/Siltation

PACK RIVER NUTRIENTS TMDLS **2008-12-31**

ID17010214PN031_04	Lower Pack River - Sand Creek to mouth	19.2	MILES

Phosphorus (Total)

ID17010214PN032_02	Trout Creek	10.13	MILES

Phosphorus (Total)

ID17010214PN038_02	Sand Creek - headwaters to Pack R	13.21	MILES

Phosphorus (Total)

ID17010214PN039_03	Upper Pack River - Hellroaring Cr to Colburn Cr	8.33	MILES

Phosphorus (Total)

ID17010214PN039_04	Upper Pack River - Colburn Cr to Sand Creek	3.8	MILES

Phosphorus (Total)

ID17010214PN041_02	Upper Pack River - tributaries above Hellroaring Cr.	56.16	MILES

Phosphorus (Total)

ID17010214PN041_03	Upper Pack River - Mainstem, Zuni Cr. to Hellroaring Cr.	10.19	MILES

Phosphorus (Total)

ID17010214PN046_03	Colburn Cr, Berry Cr to Pack R	0.36	MILES

Phosphorus (Total)

ID17010214PN047_02	Colburn Creek - Headwaters to Berry Cr.	8.61	MILES

Phosphorus (Total)

PEND OREILLE LAKE TRIBUTARIES TEMPERATURE TMDLS **2008-04-24**

ID17010214PN003_02	Hoodoo Creek - source to mouth	51.84	MILES

Temperature, water

ID17010214PN003_02a	Hoodoo Creek	15.68	MILES

Temperature, water

ID17010214PN012_04	Cocolalla Creek - Cocolalla Lake to mouth	7.69	MILES

Temperature, water

ID17010214PN014_02	Cocolalla Creek - source to Cocolalla Lake	40.66	MILES

Temperature, water

ID17010214PN014_03	Cocolalla Creek - source to Cocolalla Lake	9.2	MILES

Temperature, water

ID17010214PN014_04	Cocolalla Creek - source to Cocolalla Lake	0.2	MILES

Temperature, water

ID17010214PN021_02	Cheer Creek	4.63	MILES

Temperature, water

ID17010214PN021_03	Gold Crk.- WGold to lake PDO	1.67	MILES
Temperature, water			
ID17010214PN022_02	West Gold Creek	9.62	MILES
Temperature, water			
ID17010214PN023_02	Gold Creek, headwaters to chloride gulch	6.92	MILES
Temperature, water			
ID17010214PN023_03	Gold Creek	1.16	MILES
Temperature, water			
ID17010214PN024_02	Chloride Creek	7.14	MILES
Temperature, water			
ID17010214PN026_02	Cedar Creek	9.48	MILES
Temperature, water			
ID17010214PN027_02	Granite Creek	26.56	MILES
Temperature, water			
ID17010214PN027_03	Granite Creek, Lower	4.68	MILES
Temperature, water			
ID17010214PN030_02	Trestle Creek - source to mouth	20.99	MILES
Temperature, water			
ID17010214PN031_04	Lower Pack River - Sand Creek to mouth	19.2	MILES
Temperature, water			
ID17010214PN032_02	Trout Creek	10.13	MILES
Temperature, water			
ID17010214PN033_03	Rapid Lightning Creek, Trapper Cr to Pack R	7.8	MILES
Temperature, water			
ID17010214PN034_02	Gold Creek - headwaters to Pack R	17.8	MILES
Temperature, water			
ID17010214PN035_03	Grouse Creek - North Fork Grouse Creek to Pack R.	9.4	MILES
Temperature, water			
ID17010214PN036_02	Grouse Creek - 1st and 2nd order tribs above NF Grouse Cr	28.57	MILES
Temperature, water			
ID17010214PN036_03	Grouse Creek - Flume Cr to North Fork Grouse Cr	6.81	MILES
Temperature, water			
ID17010214PN037_02	North Fork Grouse Creek - headwaters to Grouse Cr	16.69	MILES
Temperature, water			

ID17010214PN039_03	Upper Pack River - Hellroaring Cr to Colburn Cr	8.33	MILES

Temperature, water

ID17010214PN039_04	Upper Pack River - Colburn Cr to Sand Creek	3.8	MILES

Temperature, water

ID17010214PN041_02	Upper Pack River - tributaries above Hellroaring Cr.	56.16	MILES

Temperature, water

ID17010214PN041_03	Upper Pack River - Mainstem, Zuni Cr. to Hellroaring Cr.	10.19	MILES

Temperature, water

ID17010214PN042_02	McCormick Creek - headwaters to Pack R.	10.79	MILES

Temperature, water

Combinded Biota/Habitat Assessments removed as a cause on 8/14/2007 by R. Steed. McCormic Creek has large substrate with little to no fines. I believe that the listing of Combinded Biota/and Habitat Assessment was added by mistake and is a flaw in the original analysis of data and information led to the segment being incorrectly listed. Stressor Identification has identified low nutrients and insufficient reference conditions may be why McCormic Creek does not meet BURP standards.

ID17010214PN043_02	Jeru Creek - source to mouth	6.33	MILES

Temperature, water

ID17010214PN044_02	Hellroaring Creek - Headwaters to Pack R.	10.93	MILES

Temperature, water

ID17010214PN048_03	Sand Creek - Schweitzer Cr to Pend Oreille L. at City Beach	4.04	MILES

Temperature, water

ID17010214PN049_02	Sand Creek - tributaries above Schweitzer Creek	15.93	MILES

Temperature, water

ID17010214PN049_03	Sand Creek - 3rd order portion above Schweitzer Creek	3.54	MILES

Temperature, water

PEND OREILLE TRIBUTARIES SEDIMENT TMDLS 2008-01-31

ID17010214PN015_03	Fish Creek - source to mouth	2.37	MILES

Temperature, water

ID17010214PN025_02	North Gold Creek - source to mouth	17.14	MILES

Sedimentation/Siltation

ID17010214PN025_03	North Gold Creek	2.29	MILES

Sedimentation/Siltation

ID17010214PN034_02	Gold Creek - headwaters to Pack R	17.8	MILES

Sedimentation/Siltation

ID17010214PN041_02	Upper Pack River - tributaries above Hellroaring Cr.	56.16	MILES

Sedimentation/Siltation

ID17010214PN041_03	Upper Pack River - Mainstem, Zuni Cr. to Hellroaring Cr.	10.19	MILES

Sedimentation/Siltation

ID17010214PN044_02	Hellroaring Creek - Headwaters to Pack R.	10.93	MILES

Sedimentation/Siltation

ID17010214PN048_03	Sand Creek - Schweitzer Cr to Pend Oreille L. at City Beach	4.04	MILES

Sedimentation/Siltation

ID17010214PN048_03a	Sand Creek	1.6	MILES

Sedimentation/Siltation

ID17010214PN049_02	Sand Creek - tributaries above Schweitzer Creek	15.93	MILES

Sedimentation/Siltation

ID17010214PN049_03	Sand Creek - 3rd order portion above Schweitzer Creek	3.54	MILES

Sedimentation/Siltation

ID17010214PN050_02	Spring Jack Creek - headwaters to Sand Cr.	2.62	MILES

Sedimentation/Siltation

ID17010214PN051_02	Swede Creek - headwaters to Sand Cr.	3.07	MILES

Sedimentation/Siltation

ID17010214PN052_02	Schweitzer Creek - headwaters to Sand Cr.	6.74	MILES

Sedimentation/Siltation

ID17010214PN053_02	Little Sand Creek - headwaters to Sand Cr.	13.39	MILES

Sedimentation/Siltation

17010215 Priest TMDL Approval Date

PRIEST RIVER SUBBASIN 2003-06-23

ID17010215PN001_05	Lower Priest River - Upper West Branch Priest River to mouth	35.96	MILES

Sedimentation/Siltation

ID17010215PN003_02	Middle Fork East River - source to mouth	26.32	MILES

Temperature, water

ID17010215PN003_03	Middle Fork East River - source to mouth	6.58	MILES

Temperature, water

ID17010215PN003_04	East River main stem - source to mouth	2.51	MILES

Sedimentation/Siltation

Temperature, water

ID17010215PN004_02	North Fork East River - source to mouth	27.53	MILES
Temperature, water			
ID17010215PN004_03	North Fork East River - source to mouth	2.22	MILES
Temperature, water			
ID17010215PN023_02	Reeder Creek - source to mouth	22.63	MILES
Sedimentation/Siltation			
ID17010215PN023_03	Reeder Creek - source to mouth	0.64	MILES
Sedimentation/Siltation			
ID17010215PN024_03	Kalispell Creek - Idaho/Washington border to mouth	12.18	MILES
Sedimentation/Siltation			
ID17010215PN026_02	Binarch Creek - Idaho/Washington border to mouth	13.16	MILES
Sedimentation/Siltation			
ID17010215PN030_03	Lower West Branch Priest River - Idaho/Washington border to	11.91	MILES
Sedimentation/Siltation			
ID17010215PN030_04	Lower West Branch Priest River - ID/WA border to Priest Rive	10.81	MILES
Sedimentation/Siltation			

17010301 Upper Coeur d Alene TMDL Approval Date

COEUR D'ALENE RIVER SUBBASIN, NORTH FORK 2002-02-19

ID17010301PN001_05	North Fork Coeur d'Alene River, below Prichard Cr.	26.29	MILES
Sedimentation/Siltation			
ID17010301PN003_02	Beaver Creek, headwaters and tributaries	44.54	MILES
Sedimentation/Siltation			
ID17010301PN003_03	Beaver Creek, below White Cr.	3.7	MILES
Sedimentation/Siltation			
ID17010301PN004_02	Prichard Cr., tributaries between Butte Gulch and Eagle Cr.	4.17	MILES
Sedimentation/Siltation			
ID17010301PN004_03	Prichard Creek - between Butte Gulch and Eagle Creek	5.45	MILES
Sedimentation/Siltation			
ID17010301PN004_04	Prichard Creek below Eagle Creek	2.94	MILES
Sedimentation/Siltation			
ID17010301PN005_02	Prichard Creek - headwaters and tributaries above Butte Gul	24.34	MILES
Sedimentation/Siltation			

ID17010301PN005_03	Prichard Creek - between Barton Gulch to Butte Gulch	1.98	MILES

Sedimentation/Siltation

ID17010301PN006_02	Butte Gulch - headwaters to Prichard Cr.	5.33	MILES

Sedimentation/Siltation

ID17010301PN007_02	East Fork Eagle Creek and tributaries	16.3	MILES

Cadmium

Lead

Sedimentation/Siltation

Zinc

ID17010301PN007_03	Eagle Creek	1.02	MILES

Sedimentation/Siltation

ID17010301PN009_02	Lost Creek, headwaters and tributaries	19.16	MILES

Sedimentation/Siltation

ID17010301PN009_03	Lost Creek, below East Fork Lost Creek	1.28	MILES

Sedimentation/Siltation

ID17010301PN010_03	Shoshone Creek, below Falls Creek	6.76	MILES

Sedimentation/Siltation

ID17010301PN011_02	Falls Creek and tributaries	8.09	MILES

Sedimentation/Siltation

ID17010301PN012_02	Shoshone Creek, headwaters and tribs above Falls Cr	46.84	MILES

Sedimentation/Siltation

ID17010301PN012_03	Shoshone Creek, between Little Lost Fork and Falls Creek	7.07	MILES

Sedimentation/Siltation

ID17010301PN013_05	North Fork Coeur d'Alene River btw Tepee Cr and Yellowdog	11.87	MILES

Sedimentation/Siltation

ID17010301PN014_02	Jordan Creek - headwaters and tributaries	15.33	MILES

Sedimentation/Siltation

ID17010301PN014_02a	Cub Creek	1.48	MILES

Sedimentation/Siltation

ID17010301PN014_02b	Calamity Creek	3.79	MILES

Sedimentation/Siltation

ID17010301PN017_04	Tepee Creek, between Trail and Independence Cr.	4.13	MILES

Sedimentation/Siltation

ID17010301PN017_05	Tepee Creek, below Independence Cr.	4.7	MILES

Sedimentation/Siltation

ID17010301PN020_02	Teepee Creek - headwaters and tributaries	48.55	MILES

Sedimentation/Siltation

ID17010301PN020_03	Teepee Creek, between Short Cr and Trail Cr	4.6	MILES

Sedimentation/Siltation

ID17010301PN024_02	Yellowdog Creek - Headwaters to NF CDA River	12.2	MILES

Sedimentation/Siltation

ID17010301PN028_03	Steamboat Creek and West Fork Steamboat Cr. below Comfy	6.86	MILES

Sedimentation/Siltation

ID17010301PN030_02	Little North Fork Coeur d'Alene R - headwaters to Solitaire	4.51	MILES

Sedimentation/Siltation

ID17010301PN030_03	Little NF CDA River - btw Solitaire and Deception Cr	11.26	MILES

Sedimentation/Siltation

ID17010301PN030_04	Little North Fork CDA River below Skookum Cr	23.85	MILES

Sedimentation/Siltation

ID17010301PN036_02	Burnt Cabin Creek and tributaries	12.99	MILES

Sedimentation/Siltation

ID17010301PN039_02	Copper Creek headwaters and tributaries	18.88	MILES

Sedimentation/Siltation

ID17010301PN039_03	Copper Creek, below Homer Cr.	2.75	MILES

Sedimentation/Siltation

17010302 South Fork Coeur d Alene TMDL Approval Date

COEUR D'ALENE RIVER SUBBASIN, SOUTH FORK 2003-08-21

ID17010302PN001_02	South Fork Coeur d'Alene River - Tributaries below Placer Cr	62.8	MILES

Sedimentation/Siltation

Sediment was identifed as the unknown pollutant during the development of the subbasin assessment and TMDL.

ID17010302PN001_03	South Fork Coeur d'Alene River - Canyon Creek to mouth	8.46	MILES

Sedimentation/Siltation

Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL.

ID17010302PN001_04	South Fork Coeur d'Alene River - Canyon Creek to mouth	10	MILES

Sedimentation/Siltation

Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL.

ID17010302PN001_05	South Fork Coeur d'Alene River - Canyon Creek to mouth	2.28	MILES

Sedimentation/Siltation

Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002, subsequent data also shows violations temperature criteria.

ID17010302PN002_04	Pine Creek - East Fork Pine Creek to mouth	5.31	MILES

Sedimentation/Siltation — Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002.

ID17010302PN004_02	East Fork Pine Creek - source to mouth	22.55	MILES

Sedimentation/Siltation — Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002.

ID17010302PN004_03	East Fork Pine Creek - source to mouth	4	MILES

Sedimentation/Siltation — Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002.

ID17010302PN006_02	Government Gulch - source to mouth	3.54	MILES

Sedimentation/Siltation — Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002.

ID17010302PN014_02	Canyon Creek - from and including Gorge Gulch to mouth	8.64	MILES

Sedimentation/Siltation

ID17010302PN015_02	Canyon Creek - source to Gorge Gulch	4.29	MILES

Sedimentation/Siltation

ID17010302PN016_02	Ninemile Creek - from and including East Fork Ninemile Creek	9.32	MILES

Sedimentation/Siltation — Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002, subsequent data also shows violations temperature criteria.

ID17010302PN017_02	Ninemile Creek - source to East Fork Ninemile Creek	1.79	MILES

Sedimentation/Siltation — Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002.

17010303 Coeur d Alene Lake — TMDL Approval Date

COEUR D'ALENE LAKE & RIVER SUBBASIN — 2000-07-14

ID17010303PN001_02	Tribs to Coeur d’Alene Lake	49.95	MILES

Sedimentation/Siltation

ID17010303PN002_02	Cougar Creek - source to mouth	15.7	MILES

Sedimentation/Siltation

ID17010303PN003_02	Kid Creek - source to mouth	4.08	MILES

Sedimentation/Siltation

ID17010303PN004_02	Mica Creek - source to mouth	24.18	MILES

Sedimentation/Siltation

Fecal Coliform

ID17010303PN004_03	Mica Creek - source to mouth	1.29	MILES

Sedimentation/Siltation

Fecal Coliform

ID17010303PN015_02	Latour Creek - source to mouth	50.43	MILES

Sedimentation/Siltation

ID17010303PN029_02	Wolf Lodge Creek - source to mouth	23.78	MILES

Sedimentation/Siltation

ID17010303PN029_03	Wolf Lodge Creek - source to mouth	5.74	MILES

Sedimentation/Siltation

ID17010303PN030_02	Cedar Creek - source to mouth	24.92	MILES

Sedimentation/Siltation

ID17010303PN030_03	Cedar Creek - source to mouth	1.46	MILES

Sedimentation/Siltation

ID17010303PN031_02	Marie Creek - source to mouth	19.67	MILES

Sedimentation/Siltation

17010304 St. Joe TMDL Approval Date

ST. JOE RIVER SUBBASIN 2003-08-21

ID17010304PN027_02	St. Joe River - North Fork St. Joe River to St. Maries River	159.92	MILES

Temperature, water

ID17010304PN030_02	Mica Creek - source to mouth	40.01	MILES

Sedimentation/Siltation

ID17010304PN030_03	Mica Creek - source to mouth	10.68	MILES

Sedimentation/Siltation

ID17010304PN033_02	Toles Creek - source to mouth	4.51	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN039_03	Fishhook Creek - source to mouth	4.53	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN039_04	Fishhook Creek - source to mouth	5.35	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN041_02a	Sherlock Creek	2.17	MILES

Temperature, water

ID17010304PN045_02	EF and WF Bluff Creek, upstream from their convergence	37.24	MILES

Temperature, water

ID17010304PN045_03	Bluff Creek - downstream from convergence of EF and WF	1.83	MILES

Temperature, water

ID17010304PN046_02	Mosquito Creek - source to mouth	10.48	MILES

Temperature, water

ID17010304PN047_02	Fly Creek - source to mouth	6.01	MILES

Temperature, water

ID17010304PN048_02	Beaver Creek - source to mouth	10.79	MILES

Temperature, water

ID17010304PN052_02	Simmons Creek - source to mouth	31.46	MILES

Temperature, water

ID17010304PN052_03	Simmons Creek - source to mouth	10.05	MILES

Temperature, water

ID17010304PN053_02	Gold Creek - source to mouth	25.86	MILES

Temperature, water

ID17010304PN060_02	Loop Creek - source to mouth	39.84	MILES

Temperature, water

ID17010304PN060_03	Loop Creek - source to mouth	6.59	MILES

Temperature, water

ST. MARIES RIVER SUBBASIN 2003-08-21

ID17010304PN007_05	St. Maries River - Santa Creek to mouth	24.07	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN008_02	Alder Creek - source to mouth	29.53	MILES

Sedimentation/Siltation

ID17010304PN009_02	John Creek - source to mouth	28.37	MILES

Sedimentation/Siltation

ID17010304PN010_02	Santa Creek - source to mouth	34.22	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN010_03	Santa Creek - source to mouth	4.18	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN010_04	Santa Creek - source to mouth	8.95	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN011_02	Charlie Creek - source to mouth	32.72	MILES

Sedimentation/Siltation

ID17010304PN011_03	Charlie Creek - source to mouth	5.81	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN012_05	St. Maries River - Carpenter Creek to Santa Creek	9.42	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN013_02	Tyson Creek - headwaters to mouth	14.15	MILES

Sedimentation/Siltation

ID17010304PN013_03	Tyson Creek - source to mouth	2.14	MILES

Sedimentation/Siltation

ID17010304PN014_02	Carpenter Creek - source to mouth	27.55	MILES

Sedimentation/Siltation

ID17010304PN014_03	Carpenter Creek - source to mouth	1.02	MILES

Sedimentation/Siltation

ID17010304PN015_05	St. Maries River - confluence of West Fork and Middle Fork S	10.43	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN016_02	Emerald Creek - source to mouth	40.14	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN016_03	Emerald Creek - E Fork Emerald to St. Maries River	8.68	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN017_02	West Fork St. Maries River - source to mouth	52.36	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN017_03	West Fork St. Maries River - source to mouth	5.53	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN017_04	West Fork St. Maries River - source to mouth	3.66	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN018_02	Middle Fork St. Maries River - source to mouth	34.26	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN018_03	Middle Fork St. Maries River - source to mouth	1.54	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN018_04	Middle Fork St. Maries River - source to mouth	4.71	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN018_05	Middle Fork St. Maries River - source to mouth	1.39	MILES

Sedimentation/Siltation

Temperature, water

ID17010304PN019_02	Gold Center Creek - source to mouth	19.68	MILES

Temperature, water

ID17010304PN019_03	Gold Center Creek - source to mouth	2.16	MILES

Temperature, water

ID17010304PN023_02	Crystal Creek - source to mouth	8.89	MILES

Sedimentation/Siltation

ID17010304PN024_02	Renfro Creek - source to mouth	21.98	MILES

Sedimentation/Siltation

ID17010304PN024_03	Renfro Creek - locally known as Davis Cr	1.22	MILES

Sedimentation/Siltation

ID17010304PN026_02	Thorn Creek - upper	35.2	MILES

Sedimentation/Siltation

ID17010304PN026_03	Thorn Creek - lower	1.91	MILES

Sedimentation/Siltation

17010305 Upper Spokane TMDL Approval Date

FISH CREEK TEMPERATURE, SEDIMENT & BACTERIA TMDLS 2008-06-05

ID17010305PN014_02	Fish Creek - upper and tributaries, ID/WA border to Twin L.	26.69	MILES

Sedimentation/Siltation

Temperature, water

ID17010305PN014_03	Fish Creek - mainstem, Idaho/Washington border to Twin Lake	4.53	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

SPOKANE, UPPER 2001-01-31

ID17010305PN005L_0L	Hayden Lake	3800.26	ACRES

Phosphorus (Total)

ID17010305PN013L_0L	Twin Lakes	915.03	ACRES

Phosphorus (Total)

ID17010305PN016L_0L	Hauser Lake	538.69	ACRES

Phosphorus (Total)

17010306 Hangman TMDL Approval Date

UPPER HANGMAN CREEK ASSESSMENT AND TMDLS 2007-08-29

ID17010306PN001_02	Hangman Creek - Tribs to Hangman Cr from Headwaters to W	115.6	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17010306PN001_03	Hangman Creek confluence with SF to Tribal Boundary	1.57	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Salmon

17060101 Hells Canyon TMDL Approval Date

LOWER SALMON RIVER AND HELLS CANYON TRIBUTARIES TMDLS 2010-02-09

ID17060101SL024_04	Wolf Creek - 4th Order	5.75	MILES

Temperature, water

ID17060101SL025_02	Wolf Creek - 1st and 2nd Order Tributaries	22.37	MILES

Temperature, water

ID17060101SL025_03	Wolf Creek - 3rd Order	2.83	MILES

Temperature, water

ID17060101SL025_04	Wolf Creek - 4th Order	0.87	MILES

Temperature, water

ID17060101SL028_02	Divide Creek - 1st and 2nd order Tributaries	34.98	MILES

Escherichia coli

Temperature, water

ID17060101SL028_03	Divide Creek - 3rd Order	11.04	MILES

Escherichia coli

Temperature, water

SNAKE RIVER -- HELLS CANYON TMDL 2004-03-01

ID17060101SL001_08	Snake River - Wolf Creek to Salmon River	14.68	MILES

Temperature, water

Dissolved Gas Supersaturation

ID17060101SL002_08	Snake River - Sheep Creek to Wolf Creek	26.61	MILES

Temperature, water

Dissolved Gas Supersaturation

ID17060101SL003_08	Snake River - Hells Canyon Dam to Sheep Creek	17.93	MILES

Dissolved Gas Supersaturation

SNAKE RIVER HELLS CANYON TMDL 2004-09-09

ID17060101SL003_08	Snake River - Hells Canyon Dam to Sheep Creek	17.93	MILES

Temperature, water

17060103 Lower Snake-Asotin TMDL Approval Date

TAMMANY CREEK 2002-02-14

ID17060103SL014_02	Tammany Creek - WBID 015 to unnamed tributary	14.56	MILES

Sedimentation/Siltation — Nutrient reductions for Tammany Creek will be addressed through this TMDL since phosphorus levels will decrease when sediment levels are reduced as part of TMDL implementation.

ID17060103SL014_03	Tammany Creek - Unnamed Tributary to mouth	4.27	MILES

Sedimentation/Siltation — Nutrient reductions for Tammany Creek will be addressed through this TMDL since phosphorus levels will decrease when sediment levels are reduced as part of TMDL implementation.

ID17060103SL016_02	Tammany Creek - source to Unnamed Tributary (T34N, R05W	18.64	MILES

Sedimentation/Siltation — Nutrient reductions for Tammany Creek will be addressed through this TMDL since phosphorus levels will decrease when sediment levels are reduced as part of TMDL implementation.

17060201 Upper Salmon — TMDL Approval Date

SALMON SUBBASIN, UPPER — 2003-03-19

ID17060201SL007_04	Challis Creek - Darling Creek to mouth	3.42	MILES

Sedimentation/Siltation

ID17060201SL009_03	Challis Creek - Bear Creek to Darling Creek	4.94	MILES

Sedimentation/Siltation

ID17060201SL009_04	Challis Creek - Bear Creek to Darling Creek	1.5	MILES

Sedimentation/Siltation

17060202 Pahsimeroi — TMDL Approval Date

PAHSIMEROI RIVER — 2001-12-06

ID17060202SL001_05	Pahsimeroi River - Patterson Creek to mouth	14.22	MILES

Sedimentation/Siltation

Temperature, water

ID17060202SL002_04	Pahsimeroi River - Meadow Creek to Patterson Creek	3.04	MILES

Sedimentation/Siltation

ID17060202SL002_05	Pahsimeroi River - Meadow Creek to Patterson Creek	10.21	MILES

Sedimentation/Siltation

ID17060202SL007_04	Pahsimeroi River - Furley Road (T15S, R22E) to Meadow Cree	1.56	MILES

Sedimentation/Siltation

ID17060202SL008_04	Pahsimeroi River - Big Creek to Furley Road (T15S, R22E)	3.18	MILES

Sedimentation/Siltation

ID17060202SL010_03	Pahsimeroi River - Goldburg Creek to Big Creek	5.32	MILES

Sedimentation/Siltation

ID17060202SL010_04	Pahsimeroi River - Goldburg Creek to Big Creek	6.64	MILES

Sedimentation/Siltation

ID17060202SL010_05	Pahsimeroi River - Goldburg Creek to Big Creek	0.1	MILES

Sedimentation/Siltation

ID17060202SL011_04	Pahsimeroi River - Unnamed Tributary (T12N, R23E, Sec. 22)	2.54	MILES

Sedimentation/Siltation

ID17060202SL017_04	Pahsimeroi River - Burnt Creek to Unnamed Tributary (T12N,	10.34	MILES

Sedimentation/Siltation

ID17060202SL018_04	Pahsimeroi River - Mahogany Creek to Burnt Creek	6.17	MILES

Sedimentation/Siltation

Temperature, water

ID17060202SL022_03	East Fork Pahsimeroi River - source to mouth	1.42	MILES

Sedimentation/Siltation

Temperature, water

17060203 Middle Salmon-Panther TMDL Approval Date

SALMON RIVER, MIDDLE/PANTHER CREEK 2001-07-02

ID17060203SL047_02	Salmon River - Iron Creek to Twelvemile Creek	68.74	MILES

Phosphorus (Total) — 02/04/2009 - Total Phosphorus (TP) reductions will act as a surrogate for low Dissolved Oxygen (DO). NED

17060204 Lemhi TMDL Approval Date

LEMHI 2000-03-14

ID17060204SL001_06	Lemhi River - Kenney Creek to mouth	24.63	MILES

Fecal Coliform

Escherichia coli — 04/23/10 (NED)- E. coli is listed as the impairment due to a change in DEQ's water quality standards from a criterion associated with fecal coliform to a more specific criterion for E. coli. Fecal coliform is not removed as a cause since it was the species of concern when this stream was initially listed. NED 04/23/10

ID17060204SL005_06	Lemhi River - Hayden Creek to Kenney Creek	12.77	MILES

Escherichia coli

ID17060204SL007a_03	McDevitt Creek - diversion (T19N, R23E, Sec. 36) to mouth	2.35	MILES

Sedimentation/Siltation

ID17060204SL007b_02	McDevitt Creek - source to diversion (T19N, R23E, Sec. 36)	19.07	MILES

Sedimentation/Siltation

ID17060204SL007b_03	McDevitt Creek - source to diversion (T19N, R23E, Sec. 36)	4.44	MILES

Sedimentation/Siltation

ID17060204SL024_05	Lemhi River - Peterson Creek to Hayden Creek	9.6	MILES

Escherichia coli

ID17060204SL025_05	Lemhi River - confluence of Big and Little Eightmile Creeks	5.86	MILES

Escherichia coli

ID17060204SL030_04	Lemhi River - confluence of Eighteenmile Creek and Texas Cr	6.56	MILES

Escherichia coli

ID17060204SL030_05	Lemhi River - confluence of Eighteenmile Creek and Texas Cr	10.39	MILES

Fecal Coliform

ID17060204SL041_04	Eighteenmile Creek - Hawley Creek to mouth	2.21	MILES

Sedimentation/Siltation

ID17060204SL042_03	Eighteenmile Creek - Clear Creek to Hawley Creek	8.39	MILES

Sedimentation/Siltation

ID17060204SL043_03	Eighteenmile Creek - Divide Creek to Hawley Creek	5.96	MILES

Sedimentation/Siltation

ID17060204SL045_02	Eighteenmile Creek - source to Divide Creek	29.68	MILES

Sedimentation/Siltation

ID17060204SL061_02	Kenney Creek - source to mouth	20.7	MILES

Escherichia coli

ID17060204SL062a_02	Sandy Creek - diversion (T20N, R24E, Sec. 17) to mouth	2.1	MILES

Sedimentation/Siltation

ID17060204SL062b_02	Sandy Creek - source to diversion (T20N, R24E, Sec. 17)	12.33	MILES

Sedimentation/Siltation

ID17060204SL063_02	Wimpey Creek - source to mouth	19.66	MILES

Sedimentation/Siltation

ID17060204SL064a_02	Bohannon Creek - diversion (T21N, R23E, Sec. 22) to mouth	1.36	MILES

Sedimentation/Siltation

ID17060204SL064b_02	Bohannon Creek - source to diversion (T21N, R23E, Sec. 22)	13.58	MILES

Sedimentation/Siltation

ID17060204SL065a_02	Geertson Creek - diversion (T21N, R23E, Sec. 20) to mouth	11.44	MILES

Sedimentation/Siltation

ID17060204SL065b_02	Geertson Creek - source to diversion (T21N, R23E, Sec. 20)	14.71	MILES

Sedimentation/Siltation

ID17060204SL066a_03	Kirtley Creek - diversion (T21N, R22E, Sec. 02) to mouth	2.28	MILES

Sedimentation/Siltation

Temperature, water

ID17060204SL066b_02	Kirtley Creek	19.41	MILES

Sedimentation/Siltation

17060205 Upper Middle Fork Salmon TMDL Approval Date

MIDDLE FORK SALMON RIVER TEMPERATURE TMDLS **2009-02-13**

ID17060205SL018_05	Marsh Creek - Beaver Creek to mouth	5.47	MILES

Temperature, water — During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL019_03	Marsh Creek - Knapp Creek to Beaver Creek	4.5	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL019_04	Marsh Creek - Knapp Creek to Beaver Creek	0.83	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL024_02	Marsh Creek - source to Knapp Creek	20.71	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that the cause of the biological impairment (Combined Biota/Habitat Bioassessments) was elevated temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL024_03	Marsh Creek - source to Knapp Creek	1.1	MILES

Temperature, water — During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL025_02	Knapp Creek - source to mouth	28.28	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL028_04	Beaver Creek - Bear Creek to mouth	5.26	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL030_02	Winnemucca Creek - source to mouth	12.93	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature. Refer to Table 55 and 56 on pages 97 and 98 in the TMDL for temperature data.

ID17060205SL030_03	Winnemucca Creek - source to mouth	3.69	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

17060206 Lower Middle Fork Salmon — TMDL Approval Date

MIDDLE FORK SALMON RIVER TEMPERATURE TMDLS — 2009-02-13

ID17060206SL020_04	Camas Creek - Yellowjacket Creek to mouth	4.37	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL021_04	Camas Creek - Forge Creek to Yellowjacket Creek	3.62	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL022_04	Camas Creek - Duck Creek to Forge Creek	3.8	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL023_04	Camas Creek - Silver Creek to Duck Creek	2.2	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL025_04	Camas Creek - Castle Creek to Silver Creek	2.83	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL026_04	Camas Creek - Furnance Creek to Castle Creek	2.65	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL027_04	Camas Creek - White Goat Creek to Furnance Creek	1.87	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL028_04	Camas Creek - South Fork Camas Creek to White Goat Creek	1.64	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL030_02	Camas Creek - source to South Fork Camas Creek	47.09	MILES

Temperature, water — 5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that this segment was water quality limited for temperature.

ID17060206SL033_02	Castle Creek - source to mouth	25.46	MILES

Temperature, water

ID17060206SL034_02	Silver Creek - source to mouth	48.1	MILES

Temperature, water

ID17060206SL034_03	Silver Creek - source to mouth	14.6	MILES

Temperature, water

ID17060206SL035_02	Duck Creek - source to mouth	11.02	MILES

Temperature, water

ID17060206SL038_03	Yellowjacket Creek - Hoodoo Creek to Jenny Creek	1.56	MILES

Temperature, water

ID17060206SL039_03	Yellowjacket Creek - Little Jacket Creek to Hoodoo Creek	0.82	MILES

Temperature, water

ID17060206SL041_03	Yellowjacket Creek - Trail Creek to Little Jacket Creek	2.98	MILES

Temperature, water

ID17060206SL043_02	Yellowjacket Creek - source to Trail Creek	48.52	MILES

Temperature, water

ID17060206SL043_03	Yellowjacket Creek - source to Trail Creek	5.39	MILES

Temperature, water

17060207 Middle Salmon-Chamberlain TMDL Approval Date

SALMON RIVER, MIDDLE/CHAMBERLAIN CREEK 2003-01-09

ID17060207SL067_05	Crooked Creek - Lake Creek to mouth	8.27	MILES

Temperature, water

ID17060207SL068_02	Crooked Creek - source to unnamed tributary	41.74	MILES

Temperature, water

ID17060207SL068_03	Crooked Creek - unnamed tributary to Big Creek	2.5	MILES

Temperature, water

17060208 South Fork Salmon TMDL Approval Date

SALMON RIVER, SOUTH FORK 1992-01-31

ID17060208SL001_06	South Fork Salmon River - East Fork Salmon River to mouth	36.85	MILES

Sedimentation/Siltation

ID17060208SL010_03	SF Salmon River - 3rd order (Curtis Creek to Mormon Creek)	13.7	MILES

Sedimentation/Siltation

ID17060208SL010_04	SF Salmon River - 4th order (Curtis Cr. to Buckhorn Cr.)	26.77	MILES

Sedimentation/Siltation

17060209 Lower Salmon TMDL Approval Date

LOWER SALMON RIVER AND HELLS CANYON TRIBUTARIES TMDLS 2010-02-09

ID17060209SL003_02	Cottonwood Creek - source to un-named tributary	22.65	MILES

Escherichia coli

ID17060209SL004_02	Billy Creek - source to mouth	5.16	MILES

Sedimentation/Siltation

Escherichia coli — 7/16/2010 (CB)-During the development of the Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment and TMDL, E. coli bacteria were detected in Billy Creek, and the 30-day geometric mean was used to identify impairment during the most critical time period.

Sedimentation/Siltation — 7/16/2010 (NED)-During the development of the Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment and TMDL, data was collected on total suspended solids which identified sediment to be in concentrations greater than the load capacity.

ID17060209SL007_02	Rice Creek - tributaries	55.28	MILES

Escherichia coli

Temperature, water

ID17060209SL007_03	Rice Creek - 3rd Order	8.88	MILES

Escherichia coli

Temperature, water

ID17060209SL028_03	Allison Creek - 3rd Order	2.72	MILES

Escherichia coli

ID17060209SL056_04	Rock Creek - 4th Order	3.73	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060209SL057_02	John's Creek - 1st and 2nd order tributaries	44.3	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060209SL057_02a	Telcher Creek - 1st & 2nd order stream segments	34.63	MILES

Temperature, water

ID17060209SL057_03	Rock Creek - 3rd Order	6.56	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17060209SL058_02	Grave Creek - headwaters to unnamed tributary	27.44	MILES

Escherichia coli

ID17060209SL058_03	Grave Creek - unnamed trib to Rock Creek	3.38	MILES

Escherichia coli

ID17060209SL060_02	Deep Creek - source to unnamed tributary	28.3	MILES

Escherichia coli

Sedimentation/Siltation

17060210 Little Salmon TMDL Approval Date

LITTLE SALMON RIVER SUBBASIN 2006-03-29

ID17060210SL007_04	Little Salmon River - 4th order	4.29	MILES

Temperature, water

ID17060210SL007_05	Little Salmon River - 5th order	17.05	MILES

Escherichia coli

Temperature, water

Phosphorus (Total)

ID17060210SL009_02a	Big Creek - lower 2nd order (rangeland)	4.39	MILES

Escherichia coli

Phosphorus (Total)

Southwest

17050101 C. J. Strike Reservoir — TMDL Approval Date

KING HILL - CJ STRIKE RESERVOIR SUBBASIN ASSESSMENT AND TMDL — 2006-06-21

ID17050101SW001_02	CJ Strike Reservoir & Dry Creek - 1st and 2nd order	124.21	MILES

Oxygen, Dissolved

Phosphorus (Total)

ID17050101SW001_07	CJ Strike Reservoir (excluding Bruneau arm)	11.2	MILES

Oxygen, Dissolved

Phosphorus (Total)

ID17050101SW001_07L	CJ Strike Reservoir	4765	ACRES

Oxygen, Dissolved

Phosphorus (Total)

ID17050101SW005_07	Snake River - Clover Creek to Browns Creek	25	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17050101SW012_02	Little Canyon Creek - 1st and 2nd order	31.02	MILES

Sedimentation/Siltation

ID17050101SW012_03	Little Canyon Creek - upper 3rd order	10.18	MILES

Sedimentation/Siltation

ID17050101SW012_03a	Little Canyon Creek - lower 3rd order	10.91	MILES

Sedimentation/Siltation

ID17050101SW014_03	Cold Springs Creek - 3rd order	17.28	MILES

Sedimentation/Siltation

ID17050102SW001L_0L	CJ Strike Reservoir - Bruneau Arm	2053.44	ACRES

Oxygen, Dissolved

Phosphorus (Total)

17050102 Bruneau TMDL Approval Date

BRUNEAU RIVER SUBBASIN 2001-03-13

ID17050102SW002_05	Jacks Creek - 5th order (Little Jacks Creek to mouth)	12.28	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17050102SW008_04	Sugar Valley Wash - 4th order	7.49	MILES

Escherichia coli

Oxygen, Dissolved

Sedimentation/Siltation

Phosphorus (Total)

ID17050102SW009_06	Bruneau River - 6th order (Hot Creek to mouth)	16.92	MILES

Phosphorus (Total) This pollutant replaces the previously listed pollutant "unknown" and "fish bioassessments".

ID17050102SW028_04	Clover Creek - 4th order (Deadwood Creek to Buck Flat Draw)	29.63	MILES

Escherichia coli

ID17050102SW028_05	Clover Creek (East Fork Bruneau River) - 5th order	24.74	MILES

Escherichia coli

ID17050102SW031_02	Three Creek - 1st and 2nd order	34.9	MILES

Sedimentation/Siltation

ID17050102SW031_03	Three Creek - 3rd order	7	MILES

Sedimentation/Siltation

JACKS CREEK TMDL (MODIFICATION) 2007-11-13

ID17050102SW002_05	Jacks Creek - 5th order (Little Jacks Creek to mouth)	12.28	MILES

Total Suspended Solids (TSS)

KING HILL - CJ STRIKE RESERVOIR SUBBASIN ASSESSMENT AND TMDL 2006-06-21

ID17050101SW001_07L	CJ Strike Reservoir	4765	ACRES

Oxygen, Dissolved

Phosphorus (Total)

ID17050102SW001L_0L	CJ Strike Reservoir - Bruneau Arm	2053.44	ACRES

Oxygen, Dissolved

Phosphorus (Total)

17050103 Middle Snake-Succor TMDL Approval Date

SNAKE RIVER -- MIDDLE/SUCCOR CREEK 2004-01-05

ID17050103SW000_07	Snake River - State Line to Boise River	4.13	MILES

Phosphorus (Total)

ID17050103SW001_07	Snake River - Marsing (RM425) to State Line	17.1	MILES

Nutrient/Eutrophication Biological Indicators

ID17050103SW002_03	Sage Creek - 3rd order	7.53	MILES

Escherichia coli

Sedimentation/Siltation

ID17050103SW002_04	Succor Creek - 4th order	5.51	MILES

Sedimentation/Siltation

Fecal Coliform

ID17050103SW003_02	Upper Succor Creek - 1st and 2nd order tributaries	68.41	MILES

Sedimentation/Siltation

ID17050103SW003_03	Upper Succor Creek - 3rd order (Granite Creek to State Line)	15.7	MILES

Sedimentation/Siltation

ID17050103SW005_02	Jump Creek - 1st and 2nd order	84.64	MILES

Sedimentation/Siltation

ID17050103SW005_03	Jump Creek - 3rd order	18.39	MILES

Sedimentation/Siltation

ID17050103SW006_07b	Snake River - Swan Falls to Marsing (RM425)	35.2	MILES

Phosphorus (Total)

ID17050103SW012_04	Sinker Creek - 4th order	16.22	MILES

Sedimentation/Siltation

Temperature, water

ID17050103SW014_03	Castle Creek - 3rd order tributaries	10.42	MILES

Sedimentation/Siltation

ID17050103SW014_04	Castle Creek - lower 4th order (irrigated section)	9.22	MILES

Sedimentation/Siltation

ID17050103SW014_05	Castle Creek - 5th order (Catherine Cr. to Snake River)	3.82	MILES

Sedimentation/Siltation

SUCCOR CREEK/CASTLE CREEK WATERSHED TEMPERATURE TMDLS 2007-12-11

ID17050103SW003_02	Upper Succor Creek - 1st and 2nd order tributaries	68.41	MILES

Temperature, water

ID17050103SW003_03	Upper Succor Creek - 3rd order (Granite Creek to State Line)	15.7	MILES

Temperature, water

ID17050103SW014_02	Castle Creek - 1st & 2nd order rangeland tributaries	163.99	MILES

Temperature, water

ID17050103SW014_02a	Castle Creek - 1st & 2nd order forested tributaries	56.16	MILES

Temperature, water

ID17050103SW014_03	Castle Creek - 3rd order tributaries	10.42	MILES

Temperature, water

ID17050103SW014_04	Castle Creek - lower 4th order (irrigated section)	9.22	MILES

Temperature, water

ID17050103SW014_04a	Castle Creek - upper 4th order (canyon section)	16.42	MILES

Temperature, water

ID17050103SW014_05	Castle Creek - 5th order (Catherine Cr. to Snake River)	3.82	MILES

Temperature, water

ID17050103SW020_02	South Fork Castle Creek & tributaries - 1st & 2nd order	41.8	MILES

Temperature, water

ID17050103SW020_03	SF Castle Creek - 3rd order (Clover Cr. to NF Castle Cr.)	5.53	MILES

Temperature, water

17050104 Upper Owyhee TMDL Approval Date

OWYHEE RIVER SUBBASIN, UPPER 2003-03-12

ID17050104SW005L_0L	Juniper Basin Reservoir	242.16	ACRES

Sedimentation/Siltation

ID17050104SW013_03	Blue Creek - 3rd order upstream of Blue Creek Reservoir	15.45	MILES

Sedimentation/Siltation

ID17050104SW013_0L	Blue Creek Reservoir	183.9	ACRES

Sedimentation/Siltation

ID17050104SW026_04	Deep Creek - 4th order section	15.54	MILES

Sedimentation/Siltation

Temperature, water

ID17050104SW026_05	Deep Creek - 5th order (Nickel Creek to mouth)	24.9	MILES

Sedimentation/Siltation

Temperature, water

ID17050104SW028_02	Pole Creek - 1st and 2nd order	71.29	MILES

Temperature, water

ID17050104SW028_03	Pole Creek - 3rd order	6.4	MILES

Temperature, water

ID17050104SW028_04	Pole Creek - 4th order	12.13	MILES

Temperature, water

ID17050104SW031_02	Nickel Creek & tributaries - 1st and 2nd order	77.01	MILES

Sedimentation/Siltation

ID17050104SW031_03	Nickel, Thomas & Smith Creeks - 3rd order sections	9.7	MILES

Sedimentation/Siltation

Macroinvertebrate data analyses showed that many of the samples collected had Plecoptera species that were moderately tolerant of fine sediment. No species were found that were intolerant of fine sediment. This data would indicate sediment is impairing the cold water aquatic life in Nickel Creek. Since the samples represented two variations in the stream's hydrograph, it is concluded that sediment is impairing cold water aquatic life throughout the
summer, and this includes both water column sediment and bedload sediment. Periphyton analyses showed slight impairment of cold water aquatic life. However, there was no indication that sediment is the source of impairment. Analyses also showed there are possible chronic metal toxicity and organic enrichment.

ID17050104SW032_02	Castle Creek - 1st and 2nd order	44.58	MILES

Sedimentation/Siltation

Temperature, water

ID17050104SW032_03	Castle Creek - 3rd order	6.02	MILES

Sedimentation/Siltation

Temperature, water

ID17050104SW034_02	Red Canyon Creek - 1st and 2nd order	77.67	MILES

Temperature, water

ID17050104SW034_03	Red Canyon Creek - 3rd order	10.09	MILES

Temperature, water

ID17050104SW034_04	Red Canyon Creek - 4th order	2.96	MILES

Temperature, water

17050105 South Fork Owyhee TMDL Approval Date

S.F.OWYHEE RIVER **2000-03-02**

ID17050105SW001_06	SF Owyhee River - Nevada border to Little Owyhee River	19.62	MILES

Temperature, water

ID17050105SW001_07	South Fork Owyhee River - Little Owyhee River to mouth	12.86	MILES

Temperature, water

17050107 Middle Owyhee TMDL Approval Date

OWYHEE, MIDDLE & NORTH FORKS **2000-02-17**

ID17050107SW004_02	MF Owyhee River & tributaries - 1st and 2nd order	48.03	MILES

Temperature, water

ID17050107SW004_03	Middle Fork Owyhee River - 3rd order section	4.59	MILES

Temperature, water

ID17050107SW008_02	North Fork Owyhee River - 1st and 2nd order	39.83	MILES

Temperature, water

ID17050107SW008_03	North Fork Owyhee River - 3rd order section	6.52	MILES

Temperature, water

ID17050107SW008_04	NF Owyhee River & Juniper Creek - 4th order	2.32	MILES

Temperature, water

ID17050107SW008_05	NF Owyhee River - 5th order (Juniper Creek to State Line)	6.38	MILES

Temperature, water

ID17050107SW009_02	Pleasant Valley Cr. & Tribs - 1st & 2nd order	37.73	MILES

Temperature, water

ID17050107SW009_03	Pleasant Valley Creek - 3rd order section	5.68	MILES

Temperature, water

ID17050107SW010_02	Noon Creek - entire watershed	23.96	MILES

Temperature, water

ID17050107SW011_02	Cabin & Corral Creeks & tributaries - 1st & 2nd order	36.08	MILES

Temperature, water

ID17050107SW011_03	Cabin & Corral Creeks - 3rd order sections	2.59	MILES

Temperature, water

ID17050107SW012_02	Juniper Creek & tributaries - 1st & 2nd order	24.49	MILES

Temperature, water

ID17050107SW012_03	Juniper Creek - 3rd order section	6.87	MILES

Temperature, water

17050112 Boise-Mores — TMDL Approval Date

BOISE-MORES CREEK TMDLS — 2010-02-18

ID17050112SW001L_0La	Lucky Peak Lake - Robie Creek Swim Beach area	13	ACRES

Escherichia coli

ID17050112SW009_02	Mores Creek - 1st and 2nd order	133.17	MILES

Sedimentation/Siltation

Temperature, water

ID17050112SW009_03	Mores Creek - 3rd order (Hayfork Creek to Elk Creek)	12.29	MILES

Sedimentation/Siltation

Temperature, water

ID17050112SW009_04	Mores Creek - 4th order (Elk Creek to Grimes Creek)	8.84	MILES

Sedimentation/Siltation

Temperature, water

ID17050112SW009_06	Mores Creek - 6th order (Grimes Creek to mouth)	9.36	MILES

Sedimentation/Siltation

Temperature, water

ID17050112SW011_03	Thorn Creek - 3rd order (NF Thorn Creek to mouth)	4.96	MILES

Temperature, water

ID17050112SW013_02	Grimes Creek - 1st and 2nd order	153.46	MILES

Temperature, water

ID17050112SW013_03	Grimes, Clear and Smith Creeks - 3rd order sections	8.57	MILES

Temperature, water

ID17050112SW013_04	Grimes Creek - 4th order (Clear Creek to Granite Creek)	9.53	MILES

Sedimentation/Siltation

Temperature, water

ID17050112SW013_05	Grimes Creek - 5th order (Granite Creek to mouth)	14.65	MILES

Sedimentation/Siltation

Temperature, water

ID17050112SW015_02	Macks Creek - 1st and 2nd order	17.81	MILES

Temperature, water

17050113 South Fork Boise — TMDL Approval Date

SOUTH FORK BOISE RIVER TEMPERATURE TMDLS — 2009-03-25

ID17050113SW010_05	Lime Creek - 5th order	4.07	MILES

Temperature, water

ID17050113SW032_02	Smith Creek and tributaries - 1st and 2nd order	47.4	MILES

Temperature, water

ID17050113SW032_03	Smith Creek - 3rd order (Mule Gulch to SF Boise River)	16.45	MILES

Temperature, water

17050114 Lower Boise TMDL Approval Date

BOISE RIVER, LOWER 2000-01-25

ID17050114SW001_06	Boise River - Indian Creek to mouth	45.43	MILES

Sedimentation/Siltation

Fecal Coliform

ID17050114SW005_06	Boise River -River Mile 50 to Star Bridge	38.17	MILES

Sedimentation/Siltation

Fecal Coliform

ID17050114SW005_06a	Boise River-Star to Middleton	11.3	MILES

Sedimentation/Siltation

Fecal Coliform

ID17050114SW005_06b	Boise River-Middleton to Indian Creek	7.84	MILES

Sedimentation/Siltation

Fecal Coliform

17050115 Middle Snake-payette TMDL Approval Date

SNAKE RIVER HELLS CANYON TMDL 2004-09-09

ID17050115SW001_08	Snake River - Boise River to Weiser River	73.58	MILES

Sedimentation/Siltation

Temperature, water

Cause Unknown — Nutrients Suspected Impairment-Low DO due to suspected Organic Enrichment.

Phosphorus (Total) — Phosphorus was measured by the USGS at the Snake River near Adrian and Nyssa throughout 2009. Snake River TP concentrations were 0.08 and 0.12 mg/L at Adrian and Nyssa, respectively, both of which exceed the TMDL target of 0.07mg/L. HS

17050121 Middle Fork Payette TMDL Approval Date

MIDDLE FORK PAYETTE RIVER TEMPERATURE TMDLS 2007-12-04

ID17050121SW001_04	Lower MF Payette River - 4th order	13.2	MILES

Temperature, water

ID17050121SW005_03	Upper MF Payette River - 3rd order	13.15	MILES

Temperature, water

ID17050121SW005_04	Upper MF Payette River - 4th order	8.52	MILES

Temperature, water

ID17050121SW007_02	Silver Creek - 1st and 2nd order	23.91	MILES

Temperature, water — Temperature impairment discovered during MF Payette PNV TMDL. Fairly mild impairment. HS

PAYETTE RIVER, MIDDLE FORK — 2000-07-18

ID17050121SW001_04	Lower MF Payette River - 4th order	13.2	MILES

Sedimentation/Siltation

17050122 Payette — TMDL Approval Date

BIG WILLOW TEMPERATURE TMDLS — 2008-07-01

ID17050122SW017_02	Big Willow Creek - 1st and 2nd order	164.87	MILES

Temperature, water

ID17050122SW017_03	Big Willow Creek and Dry Creek - 3rd order sections	15.82	MILES

Temperature, water

ID17050122SW017_04	Big Willow Creek - 4th order (Dry Creek to Payette Ditch)	13.29	MILES

Temperature, water

ID17050122SW017_06	Big Willow Creek - 6th order (Payette Ditch, Birding Island)	15.69	MILES

Temperature, water

BISSEL CREEK — 2003-10-24

ID17050122SW015_03a	Bissel Creek - lower 3rd order	3.94	MILES

Escherichia coli

Sedimentation/Siltation

PAYETTE RIVER, LOWER — 2000-05-31

ID17050122SW001_06	Payette River - Black Canyon Reservoir Dam to mouth	66.75	MILES

Escherichia coli

17050123 North Fork Payette — TMDL Approval Date

CASCADE RESERVOIR -- PART I — 1996-05-13

ID17050123SW007_02	West Mountain tributaries to Cascade Reservoir	60.51	MILES

Phosphorus (Total)

ID17050123SW008_05	Gold Fork - upper 5th order, above Gold Fork Ditch	2.61	MILES

Phosphorus (Total)

ID17050123SW011_02	Boulder/Willow Creek - 1st and 2nd order irrigated sections	19.2	MILES

Phosphorus (Total)

ID17050123SW011_03	Boulder Creek - 3rd order (Louie Creek to mouth)	11.55	MILES

Phosphorus (Total)

ID17050123SW012_03	Lake Fork - Little Payette Lake to Cascade Reservoir	19.53	MILES

Phosphorus (Total)

ID17050123SW015_02	Mud Creek - 1st and 2nd order	25.59	MILES

Phosphorus (Total)

ID17050123SW015_03	Mud Creek - 3rd order (Norwood to Reservoir)	7.16	MILES

Phosphorus (Total)

CASCADE RESERVOIR -- PART II 1999-04-19

ID17050123SW007_02	West Mountain tributaries to Cascade Reservoir	60.51	MILES

pH

ID17050123SW007_05	Gold Fork, 5th order, between high and low water lines	1.13	MILES

pH

Phosphorus (Total)

ID17050123SW007L_0L	Cascade Reservoir	25395	ACRES

pH

Phosphorus (Total)

ID17050123SW008_05a	Gold Fork - lower 5th order, below Gold Fork Ditch	4	MILES

Phosphorus (Total)

NORTH FORK PAYETTE RIVER SUBBASIN TMDL 2005-08-17

ID17050123SW001_06	North Fork Payette River - Cascade to Smiths Ferry	23.24	MILES

Sedimentation/Siltation

ID17050123SW002_02	Round Valley Creek - 1st and 2nd order	30.33	MILES

Sedimentation/Siltation

ID17050123SW002_03	Round Valley Creek - 3rd order	2.4	MILES

Sedimentation/Siltation

ID17050123SW003_02	Clear Creek - 1st and 2nd order tributaries	48.45	MILES

Sedimentation/Siltation

ID17050123SW003_03	Clear Creek - upper 3rd order	9.57	MILES

Sedimentation/Siltation

ID17050123SW003_03a	Clear Creek - lower 3rd order	3.69	MILES

Sedimentation/Siltation

ID17050123SW004_03a	Big Creek - lower 3rd order (Horsethief Creek to mouth)	6.14	MILES

Sedimentation/Siltation

ID17050123SW004_06	Big Creek - NF Payette River side channel	3.15	MILES

Sedimentation/Siltation

ID17050123SW017_02a	Payette Lake - Eastside tribs, inc.Lemah & parts of Fall Cr.	22.7	MILES

Temperature, water

ID17050123SW017_03	Fall Creek - 3rd order	2.5	MILES

Temperature, water

ID17050123SW018_02	North Fork Payette River - 1st and 2nd order	37.62	MILES

Temperature, water

17050124 Weiser TMDL Approval Date

WEISER RIVER WATERSHED SUBBASIN TMDL **2007-01-19**

ID17050124SW001_05	Weiser River - Keithly Cr. to Crane Cr.	20.72	MILES

Sedimentation/Siltation

Temperature, water

ID17050124SW001_06	Weiser River - Crane Creek to Galloway Dam	4.66	MILES

Temperature, water

Sedimentation/Siltation The Weiser River TMDL was approved in December 2007.

ID17050124SW001_06a	Weiser River - Galloway Dam to Snake River	16.98	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17050124SW003_05	Crane Creek - Crane Creek Reservoir Dam to mouth	17.17	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

ID17050124SW004_04	North Crane Creek -500m segment above reservoir (very small	0.31	MILES

Temperature, water

ID17050124SW005_02	South Crane & Tennison Creeks - 1st and 2nd order	53.24	MILES

Temperature, water

ID17050124SW005_03	South Crane Creek - 3rd order	7.2	MILES

Temperature, water

ID17050124SW005_04	South Crane Creek - 4th order	2.44	MILES

Temperature, water

ID17050124SW006_02	North Crane Creek watershed - all 1st and 2nd order streams	186.17	MILES

Temperature, water

ID17050124SW006_03	North Crane Creek - 3rd order	14.5	MILES

Temperature, water

ID17050124SW006_04	North Crane Creek - (Middle Creek to Reservoir)	5.84	MILES

Temperature, water

ID17050124SW007_05	Weiser River - Hornet Creek to Little Weiser River	24.37	MILES

Temperature, water

ID17050124SW007_05a	Weiser River - Little Weiser River to Keithly Creek	7.37	MILES

Sedimentation/Siltation

Temperature, water

ID17050124SW008_03	Little Weiser River - lower 3rd order (rangeland)	17.19	MILES

Escherichia coli

ID17050124SW008_04	Little Weiser River - Grays Creek to mouth	20.42	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

17050201 Brownlee Reservoir TMDL Approval Date

BROWNLEE RESERVOIR -- WEISER FLAT 2003-09-30

ID17050201SW005_02	Jenkins Creek - entire watershed	22.73	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17050201SW006_02	Scott Creek - 2nd order	15.56	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17050201SW006_03	Scott Creek - 3rd order	14.35	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17050201SW007_02	Warm Springs Creek - 1st and 2nd order	32.62	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17050201SW007_03	Warm Springs Creek - 3rd order	5.31	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17050201SW008_02	Hog Creek - 1st & 2nd order	34.42	MILES

Phosphorus (Total)

ID17050201SW008_03	Hog Creek - 3rd order section	2.89	MILES

Phosphorus (Total)

ID17050201SW012_02	Dennett Creek - 1st & 2nd order	16.39	MILES

Sedimentation/Siltation

SNAKE RIVER -- HELLS CANYON TMDL 2004-03-01

ID17050201SW001_08	Snake River - Hells Canyon Reservoir	1106.23	ACRES

Dissolved Gas Supersaturation

ID17050201SW002_08	Snake River - Oxbow Reservoir	2510.21	ACRES

Dissolved Gas Supersaturation

Phosphorus (Total) Previously listed for "Nutrients".

ID17050201SW003_08	Lower Brownlee Reservoir (Porters Flat to Brownlee Dam)	13193.87	ACRES

Phosphorus (Total) Previously listed for nutrients

ID17050201SW004_08	Upper Brownlee Reservoir (Weiser to Porters Flat)	1081.27	ACRES

Oxygen, Dissolved

Phosphorus (Total) Previously listed for nutrients.

SNAKE RIVER HELLS CANYON TMDL 2004-09-09

ID17050201SW001_08	Snake River - Hells Canyon Reservoir	1106.23	ACRES

Temperature, water

ID17050201SW002_08	Snake River - Oxbow Reservoir	2510.21	ACRES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total) Previously listed for "Nutrients".

ID17050201SW003_08	Lower Brownlee Reservoir (Porters Flat to Brownlee Dam)	13193.87	ACRES

Sedimentation/Siltation

Temperature, water

ID17050201SW004_08	Upper Brownlee Reservoir (Weiser to Porters Flat)	1081.27	ACRES

Sedimentation/Siltation

Temperature, water

WILDHORSE RIVER TMDL **2007-10-01**

ID17050201SW015_02	Wildhorse River - 1st and 2nd order, including Crooked River	73.99	MILES

Temperature, water

ID17050201SW015_04	Wildhorse River - 4th order (Bear Creek to mouth)	13.67	MILES

Temperature, water

ID17050201SW016_02	Bear Creek - 1st and 2nd order	86.61	MILES

Temperature, water

ID17050201SW016_03	Lick and Deer Creeks - 3rd order sections	4.74	MILES

Temperature, water

ID17050201SW016_04	Lick and Bear Creeks - 4th order sections	7.41	MILES

Temperature, water

Upper Snake

17040104 Palisades TMDL Approval Date

FALL CREEK WATERSHED TMDL **2004-04-08**

ID17040104SK006_02	Fall Creek - source to South Fork Fall Creek	72.67	MILES

Sedimentation/Siltation

ID17040104SK006_04	Fall Creek - source to South Fork Fall Creek	7.23	MILES

Sedimentation/Siltation

Temperature, water

PALISADES **2001-02-20**

ID17040104SK002_02	Antelope Creek - source to mouth	70.51	MILES

Sedimentation/Siltation

ID17040104SK002_03	Antelope Creek - source to mouth	6.03	MILES

Sedimentation/Siltation

ID17040104SK006_02	Fall Creek - source to South Fork Fall Creek	72.67	MILES

Temperature, water

ID17040104SK006_03	Fall Creek - source to South Fork Fall Creek	5.01	MILES

Sedimentation/Siltation

Temperature, water

ID17040104SK011_04	Bear Creek - North Fork Bear Creek to Palisades Reservoir	5.35	MILES

Sedimentation/Siltation

ID17040104SK013_02	Bear Creek - source to North Fork Bear Creek	54.72	MILES

Sedimentation/Siltation

ID17040104SK013_03	Bear Creek - source to North Fork Bear Creek	6.74	MILES

Sedimentation/Siltation

17040201 Idaho Falls TMDL Approval Date

BIRCH CREEK (IDAHO FALLS SUBBASIN) TMDL 2004-11-22

ID17040201SK008_02	Birch Creek - source to mouth	29.33	MILES

Sedimentation/Siltation — 01/07/2010 - TMDL determined that the cause of the biological impairment was sediment due to bank erosion. NED

ID17040201SK008_03	Birch Creek - source to mouth	6.21	MILES

Sedimentation/Siltation — 01/07/2010 - TMDL determined that the cause of the biological impairment was sediment due to bank erosion. NED

17040202 Upper Henrys TMDL Approval Date

UPPER AND LOWER HENRY FORK TMDLS 2010-08-17

ID17040202SK002_04	Warm River - Warm River Spring to mouth	8.74	MILES

Temperature, water

ID17040202SK002_05	Warm River - Warm River Spring to mouth	0.57	MILES

Temperature, water

ID17040202SK005_02	Warm River - source to Warm River Spring	70.29	MILES

Temperature, water

ID17040202SK005_03	Warm River - source to Warm River Spring	17.47	MILES

Temperature, water

ID17040202SK005_04	Warm River - source to Warm River Spring	7.49	MILES

Temperature, water

ID17040202SK033_02	Howard Creek - source to mouth	15.24	MILES

Temperature, water

ID17040202SK034_02	Targhee Creek - source to mouth	28.84	MILES

Temperature, water

ID17040202SK034_03	Targhee Creek - source to mouth	9.39	MILES

Temperature, water

ID17040202SK035_02	Timber Creek - source to mouth	16.97	MILES

Temperature, water

ID17040202SK035_03	Timber Creek - source to mouth	3.37	MILES

Temperature, water

ID17040202SK036_03	Duck Creek - source to mouth	4.79	MILES

Sedimentation/Siltation

Temperature, water — MDMT = 22.9 degrees C; high levels of warm water taxa in macroinvertebrates

ID17040202SK045_03	Sheridan Creek - Kilgore Road (T13N, R41E, Sec. 07) to mout	18.64	MILES

Sedimentation/Siltation

17040203 Lower Henrys — TMDL Approval Date

UPPER AND LOWER HENRY FORK TMDLS — 2010-08-17

ID17040203SK007_02	Conant Creek - Idaho/Wyoming border to mouth	45.26	MILES

Escherichia coli

ID17040203SK007_03	Conant Creek - Idaho/Wyoming border to mouth	19.41	MILES

Escherichia coli — 12/13/2010 (NED) - E.coli data collected in Conant Crek, showed a geometric mean of 131 col/100 mL, which exceeds the average monthly limit of the the geometric mean of 126 col/100 mL.

17040204 Teton — TMDL Approval Date

TETON RIVER SUBBASIN — 2003-02-24

ID17040204SK002_05	North Fork Teton River - Teton River Forks to Henrys Fork	17	MILES

Sedimentation/Siltation

ID17040204SK014_04	Teton River - Felt Dam outlet to Milk Creek	1.66	MILES

Sedimentation/Siltation

Nitrogen, Nitrate

Phosphorus (Total)

ID17040204SK015_04	Teton River - Felt Dam pool	4.12	MILES

Sedimentation/Siltation

Nitrogen, Nitrate

Phosphorus (Total)

ID17040204SK016_04	Teton River - Highway 33 bridge to Felt Dam pool	3.26	MILES

Sedimentation/Siltation

Nitrogen, Nitrate

Phosphorus (Total)

ID17040204SK017_04	Teton River - Cache Bridge (NW ¼, NE ¼, Sec. 1, T5N, R44E)	13.92	MILES

Sedimentation/Siltation

ID17040204SK018_03	Packsaddle Creek - diversion (NE ¼ Sec. 8, T5N, R44E) to mo	4.45	MILES

Sedimentation/Siltation

ID17040204SK019_02	Packsaddle Creek - source to diversion (NE ¼ Sec. 8, T5N, R	14.79	MILES

Sedimentation/Siltation

ID17040204SK020_04	Teton River - Teton Creek to Cache Bridge (NW ¼, NE ¼, Sec	13.71	MILES

Sedimentation/Siltation

ID17040204SK025_02	Mahogany Creek - source to pipeline diversion (NE ¼, Sec. 27	7.01	MILES

Sedimentation/Siltation

ID17040204SK026_02	Teton River - Trail Creek to Teton Creek	22.31	MILES

Sedimentation/Siltation

ID17040204SK041_02	Fox Creek - North Fox Creek Canal (NW ¼, Sec 29 T4N, R46	7.99	MILES

Sedimentation/Siltation

ID17040204SK044_02	Darby Creek - SW ¼, SE ¼, S10, T4N, R45E, to mouth, includ	4.14	MILES

Sedimentation/Siltation

ID17040204SK045_02	Darby Creek - Idaho/Wyoming border to SW ¼, SE ¼, Sec. 10	9.3	MILES

Sedimentation/Siltation

ID17040204SK052_03	South Leigh Creek - SE ¼, NE ¼, Sec. 1 T5N, R44E to mouth	1.8	MILES

Sedimentation/Siltation

ID17040204SK054_03	Spring Creek - North Leigh Creek to mouth	13.17	MILES

Sedimentation/Siltation

ID17040204SK056_03	Spring Creek - source to North Leigh Creek, including spring	1.44	MILES

Sedimentation/Siltation

ID17040204SK057_03	Badger Creek - spring (NW ¼, SW ¼, Sec. 26 T7N, R44E) to	4.69	MILES

Sedimentation/Siltation

TETON RIVER TMDL 2003-09-26

ID17040204SK002_05	North Fork Teton River - Teton River Forks to Henrys Fork	17	MILES

Phosphorus (Total)

ID17040204SK003_05	Teton River - Teton Dam to Teton River Forks	20.76	MILES

Phosphorus (Total)

ID17040204SK005_04	Moody Creek - confluence of North and South Fork Moody Cre	19.57	MILES

Phosphorus (Total)

ID17040204SK025_02	Mahogany Creek - source to pipeline diversion (NE ¼, Sec. 27	7.01	MILES

Temperature, water

ID17040204SK026_02	Teton River - Trail Creek to Teton Creek	22.31	MILES

Temperature, water

ID17040204SK026_04	Teton River - Trail Creek to Teton Creek	6.45	MILES

Sedimentation/Siltation

ID17040204SK053_03	South Leigh Creek - Idaho/Wyoming border to SE ¼, NE ¼, S	9.7	MILES

Sedimentation/Siltation

ID17040204SK054_03	Spring Creek - North Leigh Creek to mouth	13.17	MILES

Temperature, water

ID17040204SK056_02	Spring Creek - source to North Leigh Creek, including spring	24.2	MILES

Temperature, water

ID17040204SK056_03	Spring Creek - source to North Leigh Creek, including spring	1.44	MILES

Temperature, water

ID17040204SK058_03	Badger Creek - diversion (NW ¼, SW ¼, Sec. 9, T6N, R45E) t	6.06	MILES

Sedimentation/Siltation

17040205 Willow TMDL Approval Date

WILLOW CREEK TMDL 2004-06-30

ID17040205SK004_05	Willow Creek - Bulls Fork to Ririe Reservoir	2.99	MILES

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17040205SK005_02	Willow Creek - Birch Creek to Bulls Fork	57.41	MILES

Temperature, water

ID17040205SK005_04	Willow Creek - Birch Creek to Bulls Fork	2.47	MILES

Nutrient/Eutrophication Biological Indicators

ID17040205SK005_05	Willow Creek - Birch Creek to Bulls Fork	13.51	MILES

Temperature, water

ID17040205SK008_04	Willow Creek - Mud Creek to Birch Creek	9.2	MILES

Nutrient/Eutrophication Biological Indicators

ID17040205SK010_02	Sellars Creek - source to mouth	16.77	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK010_03	Sellars Creek - source to mouth	4.23	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK011_02	Willow Creek - Crane Creek to Mud Creek	23.25	MILES

Sedimentation/Siltation

ID17040205SK011_04	Willow Creek - Crane Creek to Mud Creek	8.4	MILES

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17040205SK012_02	Mill Creek - source to mouth	13.64	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK012_03	Mill Creek - source to mouth	3.3	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK013_02	Willow Creek - source to Crane Creek	37.35	MILES

Sedimentation/Siltation

Phosphorus (Total)

Temperature, water — 1/04/2010 - Added by EPA in January 2001. NED

ID17040205SK013_03	Willow Creek - source to Crane Creek	3.7	MILES

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17040205SK014_02	Crane Creek - source to mouth	44.98	MILES

Sedimentation/Siltation

ID17040205SK014_03	Crane Creek - source to mouth	11.07	MILES

Sedimentation/Siltation

ID17040205SK016_04	Grays Lake outlet - Hell Creek to mouth	4.7	MILES

Temperature, water

ID17040205SK017_04	Grays Lake outlet - Homer Creek to Hell Creek	8.61	MILES

Temperature, water

ID17040205SK018_02	Homer Creek - source to mouth	60.51	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK018_03	Homer Creek - source to mouth	17.26	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK019_04	Grays Lake outlet - Brockman Creek to Homer Creek	12.59	MILES

Temperature, water

ID17040205SK020_02	Grays Lake outlet - Grays Lake to Brockman Creek	18.05	MILES

Temperature, water

ID17040205SK020_04	Grays Lake outlet - Grays Lake to Brockman Creek	11.55	MILES

Temperature, water

ID17040205SK024_02	Brockman Creek - Corral Creek to mouth	20.04	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK024_03	Brockman Creek - Corral Creek to mouth	7.64	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK025_02	Brockman Creek - source to Corral Creek	17.34	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK025_03	Brockman Creek - source to Corral Creek	0.24	MILES

Temperature, water

ID17040205SK026_02	Corral Creek - source to mouth	7.21	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK027_02	Sawmill Creek - source to mouth	8.43	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK028_02	Lava Creek - source to mouth	14.67	MILES

Temperature, water

ID17040205SK028_03	Lava Creek - source to mouth	3.29	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK029_02	Hell Creek - source to mouth	38.36	MILES

Temperature, water

ID17040205SK029_03	Hell Creek - source to mouth	10.82	MILES

Sedimentation/Siltation

ID17040205SK031_02	Tex Creek - source to mouth	41.53	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK031_03	Tex Creek - source to mouth	8.85	MILES

Sedimentation/Siltation

Temperature, water

ID17040205SK032_02	Meadow Creek - source to Ririe Reservoir	40.57	MILES

Sedimentation/Siltation

ID17040205SK032_03	Meadow Creek - source to Ririe Reservoir	1.24	MILES

Sedimentation/Siltation

17040207 Blackfoot TMDL Approval Date

BLACKFOOT RIVER 2002-04-03

ID17040207SK002_05	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main	65.53	MILES

Nutrient/Eutrophication Biological Indicators

Sedimentation/Siltation — Replaces unknown as a pollutant.

ID17040207SK006_02	Corral Creek - Headwaters and unnamed tributaries	40.65	MILES

Sedimentation/Siltation

ID17040207SK006_03	Corral Creek - middle	9.22	MILES

Sedimentation/Siltation

ID17040207SK006_04	Corral Creek - lower	6.59	MILES

Sedimentation/Siltation

ID17040207SK007_02	Grizzly Creek - source to mouth	16.74	MILES

Sedimentation/Siltation

ID17040207SK007_02a	Sawmill Creek - headwaters to Grizzly Creek	7.44	MILES

Sedimentation/Siltation

ID17040207SK007_03	Grizzly Creek - source to mouth	4.54	MILES

Sedimentation/Siltation

ID17040207SK007_04	Grizzly Creek - source to mouth	2.78	MILES

Sedimentation/Siltation

ID17040207SK010_03	Trail Creek side channel near confluence with Blackfoot R.	2.68	MILES

Sedimentation/Siltation

ID17040207SK010_04	Blackfoot River - headwaters to Slug Creek	13.82	MILES
Sedimentation/Siltation			
ID17040207SK010_05	Blackfoot River - confluence of Lanes and Diamond Creeks to	20.67	MILES
Sedimentation/Siltation			
ID17040207SK011_02	Trail Creek - Headwaters and unnamed tributaries	17.88	MILES
Sedimentation/Siltation			
ID17040207SK011_03	Trail Creek - source to mouth (Below Findlayson Ranch)	5.54	MILES
Sedimentation/Siltation			
ID17040207SK011_03a	upper Trail Creek - 2nd order section to below Findlayson Ra	1.08	MILES
Sedimentation/Siltation			
ID17040207SK012_02	Slug Creek - Headwaters and unnamed tribs	101.64	MILES
Sedimentation/Siltation			
ID17040207SK012_03	Slug Creek - source to mouth (2nd order to 3rd order)	4.79	MILES
Sedimentation/Siltation			
ID17040207SK012_04	Slug Creek - source to mouth	18.15	MILES
Sedimentation/Siltation			
ID17040207SK013_02	Dry Valley Creek - unnamed tribs	21.3	MILES
Sedimentation/Siltation			
ID17040207SK013_02a	Dry Valley Creek	6.43	MILES
Sedimentation/Siltation			
ID17040207SK013_02b	Chicken Creek (tributary to Dry Valley Creek)	2.86	MILES
Sedimentation/Siltation			
ID17040207SK014_02	Maybe Creek - source to mouth	5.23	MILES
Sedimentation/Siltation			
ID17040207SK015_04	Blackfoot River - small section near Diamond Creek	0.36	MILES
Sedimentation/Siltation			
ID17040207SK016_02	Diamond Creek - unnamed tributaries	41.77	MILES
Sedimentation/Siltation			
ID17040207SK016_02a	upper Diamond Creek	4.43	MILES
Sedimentation/Siltation			
ID17040207SK016_02b	Coyote Creek	2.88	MILES
Sedimentation/Siltation			
ID17040207SK016_02c	Bear Canyon - headwaters to Diamond Creek	2.43	MILES
Sedimentation/Siltation			

ID17040207SK016_02d	Timber Creek - headwaters to Diamond Creek	5.55	MILES

Sedimentation/Siltation

ID17040207SK016_02e	Cabin Creek	3.42	MILES

Sedimentation/Siltation

ID17040207SK016_02f	Stewart Canyon	2.98	MILES

Sedimentation/Siltation

ID17040207SK016_02g	Campbell Canyon	2.16	MILES

Sedimentation/Siltation

ID17040207SK016_02h	upper Kendall Creek	1.56	MILES

Sedimentation/Siltation

ID17040207SK016_02i	lower Kendall Creek	0.77	MILES

Sedimentation/Siltation

ID17040207SK016_03	lower Diamond Creek	19.26	MILES

Sedimentation/Siltation

ID17040207SK016_03a	middle Diamond Creek	10.65	MILES

Sedimentation/Siltation

ID17040207SK018_02	Lanes Creek - unnamed tributaries	22.28	MILES

Sedimentation/Siltation

ID17040207SK018_02a	Lanes Creek - headwaters to FS boundary	3.61	MILES

Sedimentation/Siltation

ID17040207SK018_02b	Daves Creek - Headwaters to road crossing	3.03	MILES

Sedimentation/Siltation

ID17040207SK018_02c	Daves Creek - road crossing to Lanes Creek	0.67	MILES

Sedimentation/Siltation

ID17040207SK018_02d	Corrailsen Creek	3.91	MILES

Sedimentation/Siltation

ID17040207SK018_02e	Lanes Creek - FS boundary to Lander Creek	3.12	MILES

Sedimentation/Siltation

ID17040207SK018_03	Lanes Creek - Lander Creek to Chippy Creek	3.65	MILES

Sedimentation/Siltation

ID17040207SK018_04	Lanes Creek - Chippy Creek to Blackfoot River	9.41	MILES

Sedimentation/Siltation

ID17040207SK019_02	Bacon Creek - unnamed tributaries	18.92	MILES

Sedimentation/Siltation

ID17040207SK019_02a	upper Bacon Creek	9.09	MILES
Sedimentation/Siltation			
ID17040207SK019_02b	Bacon Creek - below FS boundary	3.5	MILES
Sedimentation/Siltation			
ID17040207SK019_03	Bacon Creek - below FS boundary	2.05	MILES
Sedimentation/Siltation			
ID17040207SK019_04	Bacon Creek - below FS boundary	4.62	MILES
Sedimentation/Siltation			
ID17040207SK022_02	Upper Sheep Creek - headwaters and unnamed tributaries	13.49	MILES
Sedimentation/Siltation			
ID17040207SK022_03	lower Sheep Creek	1.32	MILES
Sedimentation/Siltation			
ID17040207SK022_03a	middle Sheep Creek	3.53	MILES
Sedimentation/Siltation			
ID17040207SK023_02	Angus Creek - unnamed tribs	11.34	MILES
Sedimentation/Siltation			
ID17040207SK023_02a	Rasmussen Creek	6.26	MILES
Sedimentation/Siltation			
ID17040207SK023_02b	upper Angus Creek - headwaters to Rasumussen Creek	7.78	MILES
Sedimentation/Siltation			
ID17040207SK023_04	Lower Angus Creek - Rasmussen Creek to Blackfoot River	3.46	MILES
Sedimentation/Siltation			
ID17040207SK025_02	Meadow Creek - headwaters and unnamed tributaries	58.12	MILES
Sedimentation/Siltation			
ID17040207SK025_02a	Meadow Creek - headwaters to Crooked Creek	13.09	MILES
Sedimentation/Siltation			
ID17040207SK025_02d	Meadow Creek - HW to Fk (including Wham Creek)	12.31	MILES
Sedimentation/Siltation			
ID17040207SK025_03	Meadow Creek - Crooked Creek to Clarks Cut	7.18	MILES
Sedimentation/Siltation			
ID17040207SK025_04	Meadow Creek - Blackfoot Reservoir to Clarks Cut	9.71	MILES
Sedimentation/Siltation			

ID17040207SK026_02	Brush Creek - source to mouth	54.54	MILES

Sedimentation/Siltation

Temperature, water

ID17040207SK026_03	Brush Creek - source to mouth	13.35	MILES

Sedimentation/Siltation

Temperature, water

ID17040207SK030_02	Wolverine Creek - source to Jones Cr	32.88	MILES

Nutrient/Eutrophication Biological Indicators

Sedimentation/Siltation — Replaces unknown as a pollutant.

ID17040207SK030_03	Wolverine Creek - Jones Cr to Mouth	2.54	MILES

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

ID17040207SK031_02	Jones Creek - source to mouth	4.54	MILES

Nutrient/Eutrophication Biological Indicators — Nutrient TMDL approved in 2002.

17040208 Portneuf — TMDL Approval Date

PARADISE CREEK — 1998-02-12

ID17040208SK018_02a	Twentyfour Mile Creek - Twentyfour Mile Reservoir to Pole Ca	1.18	MILES

Sedimentation/Siltation

PORTNEUF RIVER — 2001-04-16

ID17040208SK001_02	Portneuf River - Marsh Creek to American Falls Reservoir	65.47	MILES

Oil and Grease

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK001_05	Portneuf River - Marsh Creek to American Falls Reservoir	28.79	MILES

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

Nitrogen (Total)

ID17040208SK003_02	lower Gibson Jack Creek	0.7	MILES

Sedimentation/Siltation

ID17040208SK003_02a	Gibson Jack Creek - upper and middle	14.66	MILES

Sedimentation/Siltation — Gibson Jack Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK004_02	Mink Creek - source to mouth	29	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK004_02a	Kinney Creek - headwaters to Mink Creek	2.57	MILES

Nitrogen (Total) — Included in Mink Creek TMDL approved in 2001.

Phosphorus (Total) — Included in Mink Creek TMDL approved in 2001.

ID17040208SK004_02b	West Fork Mink Creek	8.71	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK004_02c	South Fork Mink Creek - headwaters to Mink Creek	6.77	MILES

Sedimentation/Siltation — Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Nitrogen (Total) — Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Phosphorus (Total) — Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK004_02d	East Fork Mink Creek	6.73	MILES

Sedimentation/Siltation

Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Nitrogen (Total)

Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Phosphorus (Total)

Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK004_03	East Fork Mink Creek	0.65	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK004_03a	Mink Creek - S. Fk to E. Fk Mink Creek	2.82	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK004_04	Lower Mink Creek	3.8	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK004_04a	Mink Creek	1.52	MILES

Sedimentation/Siltation	Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08
Nitrogen (Total)	Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08
Phosphorus (Total)	Mink Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK006_03	upper middle Marsh Creek	11.09	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK006_04	Lower Marsh Creek	17.68	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK006_04a	lower middle Marsh Creek	19.77	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK007_02	lower Walker Creek	2.89	MILES

Sedimentation/Siltation

ID17040208SK007_02a	upper Walker Creek - headwaters to S. FK. Walker Creek	10.72	MILES

Sedimentation/Siltation

Walker Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK008_02	Bell Marsh Creek - source to mouth	1.9	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK008_02a	upper Bell Marsh Creek - headwaters to USFS boundary	6.71	MILES

Sedimentation/Siltation

Bell Marsh Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Nitrogen (Total)

Bell Marsh Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Phosphorus (Total)

Bell Marsh Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK008_02b	lower Bell Marsh Creek	2.68	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK009_02	lower Goodenough Creek	3.81	MILES

Sedimentation/Siltation

ID17040208SK009_02a	upper Goodenough Creek - headwaters to Mormon Canyon	7.65	MILES

Sedimentation/Siltation

ID17040208SK009_02b	Goodenough Creek	3.67	MILES

Sedimentation/Siltation

Goodenough Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK010_02	Garden Creek - source to mouth	19.44	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK010_02a	upper Garden Creek - headwaters to Garden Creek Gap	9.49	MILES

Sedimentation/Siltation

Garden Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Nitrogen (Total)

Garden Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Phosphorus (Total)

Garden Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK010_02b	lower Garden Creek	7.65	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK011_02	Hawkins Creek - Hawkins Reservoir Dam to mouth	23.59	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK011_03	lower Hawkins Creek	9.09	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK013_02	Hawkins Creek - source to Hawkins Reservoir	19.28	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK013_02a	Hawkins Creek	4.97	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK013_02b	Yellow Dog Creek - headwaters to Hawkins Creek	6	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK013_03	Hawkins Creek - source to Hawkins Reservoir	0.93	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK014_02	Cherry Creek - ephemeral tributaries	17.62	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

Sedimentation/Siltation   Replaces unknown as a pollutant.

ID17040208SK014_02a	upper Cherry Creek	10.03	MILES

Sedimentation/Siltation

Cherry Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Nitrogen (Total)

Cherry Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

Phosphorus (Total)

Cherry Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). Nutrient and sediment targets apply to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that meet or continue to support beneficial uses and are not negatively affecting water quality and therefore beneficial uses in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK014_02b	Cherry Creek	5.85	MILES

Sedimentation/Siltation

ID17040208SK014_03	Cherry Creek - lower	1.58	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK014_04	Birch Creek from Cherry Creek to Marsh Creek confluences	2.73	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK015_02	Birch Creek - source to mouth	13.07	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK015_03	Birch Creek - source to mouth	3.96	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK015_03a	Birch Creek - Mill Creek to I-15 road crossing	2.8	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK016_02	Portneuf R - 2nd order tribs-Chesterfield Dam to Marsh Creek	155.67	MILES

Sedimentation/Siltation

Replaces unknown as a pollutant.

ID17040208SK016_03	Portneuf River - Chesterfield Reservoir Dam to Marsh Creek	5.52	MILES

Oil and Grease

Sedimentation/Siltation

Fecal Coliform

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK016_04	Portneuf River - Chesterfield Reservoir Dam to Marsh Creek	2.82	MILES

Oil and Grease

Sedimentation/Siltation

Fecal Coliform

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK016_05	Portneuf River - 5th Order	52.79	MILES

Oil and Grease

Sedimentation/Siltation

Fecal Coliform

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK017_02	Dempsey Creek - source to mouth	1.38	MILES

Sedimentation/Siltation

ID17040208SK017_02a	East Creek	11.05	MILES

Sedimentation/Siltation

ID17040208SK017_02b	Deer Creek	3.28	MILES

Sedimentation/Siltation

ID17040208SK017_02d	Dempsey Creek	18.45	MILES

Sedimentation/Siltation

ID17040208SK017_03	Lower Dempsey Creek	3.58	MILES

Sedimentation/Siltation

ID17040208SK018_02	Twentyfourmile Creek - source to mouth	59.25	MILES

Sedimentation/Siltation

ID17040208SK018_03	Twentyfourmile Creek - source to mouth	5.14	MILES

Sedimentation/Siltation

ID17040208SK018_03a	Twentyfour Mile Creek	6.09	MILES

Sedimentation/Siltation

ID17040208SK020_02	Portneuf R.-tributaries - source to Chesterfield Reservoir	91.91	MILES

Sedimentation/Siltation

ID17040208SK020_03	Portneuf River - source to Chesterfield Reservoir	17.38	MILES

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK021_02	Toponce Creek - source to mouth	2.66	MILES

Sedimentation/Siltation

ID17040208SK021_02a	Little Toponce Creek	5.23	MILES

Sedimentation/Siltation

ID17040208SK021_02b	North Fork Toponce Creek	6.81	MILES

Sedimentation/Siltation

ID17040208SK021_02c	Middle Fork Toponce Creek	8.28	MILES

Sedimentation/Siltation

ID17040208SK021_02d	South Fork Toponce Creek	18.35	MILES

Sedimentation/Siltation

ID17040208SK021_02e	upper Toponce Creek	5.83	MILES

Sedimentation/Siltation

ID17040208SK021_03	lower Toponce Creek	4.24	MILES

Sedimentation/Siltation

ID17040208SK021_03a	middle Toponce Creek	4.22	MILES

Sedimentation/Siltation

ID17040208SK022_02	Pebble Creek - source to mouth	1.82	MILES

Sedimentation/Siltation

ID17040208SK022_02a	upper Pebble Creek/Big Canyon	9.23	MILES

Sedimentation/Siltation

ID17040208SK022_02b	Clear Creek	2.84	MILES

Sedimentation/Siltation

ID17040208SK022_02c	South Fork Pebble Creek	6.47	MILES

Sedimentation/Siltation

ID17040208SK022_02d	North Fork Pebble Creek	12.87	MILES

Sedimentation/Siltation

ID17040208SK022_03	lower Pebble Creek	6.06	MILES

Sedimentation/Siltation

Pebble Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK022_03a	North Fork Pebble Creek	0.99	MILES

Sedimentation/Siltation

ID17040208SK023_02	Rapid Creek - source to mouth	28.86	MILES

Sedimentation/Siltation

ID17040208SK023_02a	upper Jackson Creek	2.37	MILES

Sedimentation/Siltation

ID17040208SK023_02b	lower Jackson Creek	2.14	MILES

Sedimentation/Siltation

ID17040208SK023_02c	Webb Creek	10.19	MILES

Sedimentation/Siltation

ID17040208SK023_02d	Sawmill Creek	4.29	MILES

Sedimentation/Siltation

ID17040208SK023_02e	upper Moonlight Creek	2.76	MILES

Sedimentation/Siltation

ID17040208SK023_02f	lower Moonlight Creek	0.71	MILES

Sedimentation/Siltation

ID17040208SK023_02g	West Fork Rapid Creek	6.57	MILES

Sedimentation/Siltation

ID17040208SK023_02h	North Fork Inman Creek	4.71	MILES

Sedimentation/Siltation

ID17040208SK023_02i	North Fork Rapid Creek	4.87	MILES

Sedimentation/Siltation

ID17040208SK023_03	lower Rapid Creek	5.62	MILES

Sedimentation/Siltation

ID17040208SK023_03a	lower Inman Creek	2.37	MILES

Sedimentation/Siltation

ID17040208SK023_03b	Inman Creek - Fks to USFS boundary	2.32	MILES

Sedimentation/Siltation

Rapid Creek was listed prior to the Portneuf TMDL (approved 4-18-2001) being prepared. This AU was included in the Portneuf River TMDL (accepted 4-16-2001). A sediment target applies to this AU as part of the TMDL. This AU supports beneficial use; however, in order for the TMDL to apply, it will remain in Category 4a for this Integrated Report. AUs that support beneficial uses and are not negatively affecting water quality (and therefore beneficial uses) in downstream receiving waters will be moved to Category 2 in ensuing reporting cycles. Mladenka 3-24-08

ID17040208SK023_03c	North Fork Rapid Creek	1.59	MILES

Sedimentation/Siltation

ID17040208SK024_02	Pocatello Creek - confluence of North and South Fork Poca te	3.71	MILES

Sedimentation/Siltation

ID17040208SK024_03	lower Pocatello Creek	2.02	MILES

Sedimentation/Siltation

ID17040208SK024_03a	middle Pocatello Creek - Fks to Outback Driving Range	2.02	MILES

Sedimentation/Siltation

ID17040208SK026_02	North Fork Pocatello Creek - source to mouth	6.35	MILES

Sedimentation/Siltation

ID17040208SK026_02a	North Fork Pocatello Creek - headwaters to Pocatello Creek	10.52	MILES

Sedimentation/Siltation

PORTNEUF RIVER TMDL 2010-07-29

ID17040208SK001_05	Portneuf River - Marsh Creek to American Falls Reservoir	28.79	MILES

Oil and Grease

Sedimentation/Siltation

Phosphorus (Total)

ID17040208SK004_02a	Kinney Creek - headwaters to Mink Creek	2.57	MILES

Sedimentation/Siltation

Included in Mink Creek TMDL approved in 2001.

ID17040208SK004_04	Lower Mink Creek	3.8	MILES

Escherichia coli

ID17040208SK005_02	Indian Creek - source to mouth	8.13	MILES

Escherichia coli

ID17040208SK006_03a	Marsh Creek - Rt Fk to Red Rock Pass	3.79	MILES

Escherichia coli

Sedimentation/Siltation

Nitrogen (Total)

Phosphorus (Total)

ID17040208SK006_04a	lower middle Marsh Creek	19.77	MILES

Escherichia coli

ID17040208SK010_02b	lower Garden Creek	7.65	MILES

Escherichia coli

ID17040208SK012L_0L	Hawkins Reservoir	66.72	ACRES

Phosphorus (Total)

Nitrogen (Total) — 12/23/2010 (NED) - A total nitrogen target of 1.0 mg/L as TN was established in Portneuf River TMDL Revision and Addendum, approved July 29, 2010.

Oxygen, Dissolved — Based on field sampling in 2007, TP is very high (mean=0.19), one chlorophyll a sampling event=60, and there were several exceedences of DO in the upper 80% of the column.

12/23/2010 - A chlorophyll a target of 0.015 mg/L has been established in order to achieve the DO criterion of 6.0 mg/L.

ID17040208SK014_02	Cherry Creek - ephemeral tributaries	17.62	MILES

Escherichia coli

ID17040208SK014_02a	upper Cherry Creek	10.03	MILES

Escherichia coli

ID17040208SK014_02b	Cherry Creek	5.85	MILES

Escherichia coli

ID17040208SK017_02c	Beaverdam Creek	3.84	MILES

Sedimentation/Siltation

ID17040208SK017_03	Lower Dempsey Creek	3.58	MILES

Escherichia coli — Did not meet state WQS for SCR in 2005.

ID17040208SK025_02	South Fork Pocatello Creek - source to mouth	5.02	MILES

Sedimentation/Siltation

17040209 Lake Walcott — TMDL Approval Date

LAKE WALCOTT — 2000-06-27

ID17040209SK001_02	Snake River - Heyburn/Burley Bridge (T10S, R23E, Sec.17) to	6.39	MILES

Phosphorus (Total)

ID17040209SK001_07	Snake River-Heyburn/Burley Bridge to Milner Dam-Gooding C	15.58	MILES

Nutrient/Eutrophication Biological Indicators

Sedimentation/Siltation

ID17040209SK002_02	Snake River - Minidoka Dam to Heyburn/Burley Bridge (T10S,	30.93	MILES

Phosphorus (Total)

ID17040209SK002_07	Snake River - Minidoka Dam to Heyburn/Burley Bridge (T10S,	20.63	MILES

Phosphorus (Total) 3/18/2009 - Nutrient/Eutrophication Biological Indicators changed to Phosphorus (Total). NED

ID17040209SK008_04	Rock Creek - confluence of South and East Fork Rock Creeks	13.24	MILES

Sedimentation/Siltation

ID17040209SK009_02	South Fork Rock Creek - source to mouth	246.4	MILES

Sedimentation/Siltation

ID17040209SK009_03	South Fork Rock Creek - source to mouth	4.01	MILES

Sedimentation/Siltation

ID17040209SK009_04	South Fork Rock Creek - source to mouth	20.13	MILES

Sedimentation/Siltation

ID17040209SK010_02	East Fork Rock Creek - source to mouth	23.25	MILES

Sedimentation/Siltation

ID17040209SK010_03	East Fork Rock Creek - source to mouth	9.24	MILES

Sedimentation/Siltation

17040210 Raft TMDL Approval Date

RAFT RIVER WATERSHED TMDL 2004-07-27

ID17040210SK001_05	Raft River - Heglar Canyon Creek to mouth	12.42	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040210SK002_02	Raft River - Cassia Creek to Heglar Canyon Creek	167.19	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040210SK002_05	Raft River - Cassia Creek to Heglar Canyon Creek	21.42	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040210SK003_04	Cassia Creek - Conner Creek to mouth	12.77	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040210SK005_04	Cassia Creek - Clyde Creek to Conner Creek	4.49	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040210SK007_02	Cassia Creek - source to Clyde Creek	38.98	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040210SK007_03	Cassia Creek - source to Clyde Creek	7.11	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040210SK007_04	Cassia Creek - source to Clyde Creek	5.51	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040210SK007_05	Cassia Creek - source to Clyde Creek	4.82	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

ID17040210SK008_04	Raft River - Cottonwood Creek to Cassia Creek	22.91	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

ID17040210SK010_04	Raft River - Unnamed Tributary (T15S, R26E, Sec. 24) to Cott	19.1	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17040210SK013_04	Raft River - Idaho/Utah border to Edwards Creek	8.97	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

ID17040210SK019_02	Sublett Creek - Sublett Reservoir Dam to mouth	51.44	MILES

Phosphorus (Total)

ID17040210SK020_0L	Sublett Reservoir	79.07	ACRES

Phosphorus (Total) This replaces the cause unknown pollutant that was previously listed.

ID17040210SK022_02	Lake Fork - source to Sublett Reservoir	17	MILES

Escherichia coli

Phosphorus (Total)

ID17040210SK022_03	Lake Fork - source to Sublett Reservoir	1.34	MILES

Phosphorus (Total)

17040211 Goose TMDL Approval Date

GOOSE CREEK TMDL 2004-07-25

ID17040211SK000_02A	Little Cottonwood Creek	63.19	MILES

Escherichia coli

ID17040211SK003_02	Trapper Creek - from and including Squaw Creek to Lower Go	28.09	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040211SK003_04	Trapper Creek - from and including Squaw Cr. to reservoir.	7.3	MILES

Sedimentation/Siltation

Phosphorus (Total) This pollutant replaces the previously listed pollutant "unknown".

ID17040211SK004_02	Trapper Creek - source to Squaw Creek	32.58	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040211SK004_03	Trapper Creek - source to Squaw Creek	8.95	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040211SK005_03	Goose Creek - Beaverdam Creek to Lower Goose Creek Res	7.18	MILES

Temperature, water

ID17040211SK005_05	Goose Creek - Beaverdam Creek to Lower Goose Creek Res	18.76	MILES

Sedimentation/Siltation

Temperature, water

ID17040211SK006_02	Beaverdam Creek - source to mouth	55.9	MILES

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Phosphorus (Total)

ID17040211SK006_03	Beaverdam Creek - source to mouth	6.32	MILES

Escherichia coli

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040211SK009_02	Birch Creek - Idaho/Utah border to mouth	8.67	MILES

Escherichia coli

ID17040211SK009_03	Birch Creek - Idaho/Utah border to mouth	2.28	MILES

Fecal Coliform

Phosphorus (Total)

ID17040211SK011_02	Cold Creek - source to mouth	15.76	MILES

Temperature, water

ID17040211SK012_02	Unnamed tributary to Birch Creek	66.91	MILES

Fecal Coliform

Phosphorus (Total)

ID17040211SK012_03	Birch Creek - source to mouth	6.67	MILES

Fecal Coliform

Phosphorus (Total)

ID17040211SK012_04	Birch Creek - source to mouth	10.82	MILES

Fecal Coliform

Phosphorus (Total)

17040212 Upper Snake-Rock TMDL Approval Date

BILLINGSLEY CREEK 1993-08-23

ID17040212SK033_02	Billingsley Creek - source to mouth	8.13	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

SNAKE RIVER WATERSHED, MIDDLE 1997-04-25

ID17040212SK001_07	Snake River - Lower Salmon Falls to Clover Creek	26.62	MILES

Fecal Coliform

Phosphorus (Total)

ID17040212SK007_07	Snake River - Rock Creek to Box Canyon Creek	18.3	MILES

Phosphorus (Total)

ID17040212SK020_07	Snake River - Milner Dam to Twin Falls	21.29	MILES

Phosphorus (Total)

SNAKE-ROCK, UPPER 2000-08-25

ID17040212SK000_02	Unclassified Waters in CU 17040212	392.31	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK001_07	Snake River - Lower Salmon Falls to Clover Creek	26.62	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK005_02	Snake River - Box Canyon Creek to Lower Salmon Falls	17.39	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK005_07	Snake River - Box Canyon Creek to Lower Salmon Falls	16.51	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK007_02	Snake River - Rock Creek to Box Canyon Creek	15.68	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK007_07	Snake River - Rock Creek to Box Canyon Creek	18.3	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK008_02	Deep Creek - High Line Canal to mouth	15.81	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040212SK008_03	Deep Creek - High Line Canal to Snake River	9.69	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040212SK010_02	Mud Creek - Deep Creek Road (T09S, R14E) to mouth	7.39	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK010_03	Mud Creek - Deep Creek Road (T09S, R14E) to mouth	1.07	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK011_02	Mud Creek - source to Deep Creek Road (T09S, R14E)	5.4	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK012_02	Cedar Draw - source to mouth	17.97	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK012_03	Cedar Draw - source to mouth	2.93	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK013_04	Rock Creek -river mile 25 (T11S, R18E, Sec. 36) to mouth	4.63	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK013_05	Rock Creek -river mile 25 (T11S, R18E, Sec. 36) to mouth	20.11	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040212SK014_02	Cottonwood Creek - source to mouth	37.64	MILES

Fecal Coliform

ID17040212SK014_04	Cottonwood Creek - source to mouth	6.9	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK015_02	McMullen Creek - source to mouth	50.02	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK015_03	McMullen Creek - source to mouth	9.41	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK016_04	Rock Creek - Fifth Fork Rock Creek to river mile 25 (T11S, R	8.31	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK019_07	Snake River - Twin Falls to Rock Creek	11.87	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK020_07	Snake River - Milner Dam to Twin Falls	21.29	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK022_03	Dry Creek - source to mouth	9.85	MILES

Fecal Coliform

ID17040212SK023_02	West Fork Dry Creek - source to mouth	10.72	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK027_02	Vinyard Creek - Vinyard Lake to mouth	10.81	MILES

Phosphorus (Total)

ID17040212SK028_02	Clear Lakes	22.24	ACRES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK033_02	Billingsley Creek - source to mouth	8.13	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK034_04	Clover Creek - Pioneer Reservoir Dam outlet to Snake River	9.96	MILES

Sedimentation/Siltation

Fecal Coliform

Phosphorus (Total)

ID17040212SK035_04	Pioneer Reservoir	229.81	ACRES

Sedimentation/Siltation

Phosphorus (Total)

UPPER SNAKE ROCK TMDL (MODIFICATION) 2005-09-14

ID17040212SK000_02	Unclassified Waters in CU 17040212	392.31	MILES

Sedimentation/Siltation

ID17040212SK001_02	Snake River - Lower Salmon Falls to Clover Creek	22.11	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK001_07	Snake River - Lower Salmon Falls to Clover Creek	26.62	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK005_02	Snake River - Box Canyon Creek to Lower Salmon Falls	17.39	MILES

Sedimentation/Siltation

ID17040212SK005_07	Snake River - Box Canyon Creek to Lower Salmon Falls	16.51	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK006_02	Riley Creek - source to mouth	4.16	MILES

Total Suspended Solids (TSS)

ID17040212SK007_02	Snake River - Rock Creek to Box Canyon Creek	15.68	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK007_07	Snake River - Rock Creek to Box Canyon Creek	18.3	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK008_02	Deep Creek - High Line Canal to mouth	15.81	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK008_03	Deep Creek - High Line Canal to Snake River	9.69	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK010_02	Mud Creek - Deep Creek Road (T09S, R14E) to mouth	7.39	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK010_03	Mud Creek - Deep Creek Road (T09S, R14E) to mouth	1.07	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK011_02	Mud Creek - source to Deep Creek Road (T09S, R14E)	5.4	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK012_02	Cedar Draw - source to mouth	17.97	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK012_03	Cedar Draw - source to mouth	2.93	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK013_04	Rock Creek -river mile 25 (T11S, R18E, Sec. 36) to mouth	4.63	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK013_05	Rock Creek -river mile 25 (T11S, R18E, Sec. 36) to mouth	20.11	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK014_02	Cottonwood Creek - source to mouth	37.64	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040212SK014_04	Cottonwood Creek - source to mouth	6.9	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK015_02	McMullen Creek - source to mouth	50.02	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK015_03	McMullen Creek - source to mouth	9.41	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK016_04	Rock Creek - Fifth Fork Rock Creek to river mile 25 (T11S, R	8.31	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK019_02	Snake River - Twin Falls to Rock Creek	0.92	MILES

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK019_07	Snake River - Twin Falls to Rock Creek	11.87	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK020_07	Snake River - Milner Dam to Twin Falls	21.29	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK022_03	Dry Creek - source to mouth	9.85	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK023_02	West Fork Dry Creek - source to mouth	10.72	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK028_02	Clear Lakes	22.24	ACRES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK031_02	Thousand Springs	4.6	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040212SK033_02	Billingsley Creek - source to mouth	8.13	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK034_04	Clover Creek - Pioneer Reservoir Dam outlet to Snake River	9.96	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK035_04	Pioneer Reservoir	229.81	ACRES

Sedimentation/Siltation

Total Suspended Solids (TSS)

ID17040212SK036_02	Clover Creek - source to Pioneer Reservoir	55.67	MILES

Sedimentation/Siltation

Phosphorus (Total)

17040213 Salmon Falls TMDL Approval Date

SALMON FALLS CREEK SUBBASIN TMDLS 2008-02-27

ID17040213SK000_04	Cedar Creek-reservoir to Salmon Falls Creek.	19.54	MILES

Sedimentation/Siltation

Temperature, water

ID17040213SK001_06	Salmon Falls Creek - Devil Creek to mouth	21.93	MILES

Temperature, water

Total Suspended Solids (TSS)

Nitrogen (Total)

Phosphorus (Total) This pollutant replaces the previously listed pollutant unknown.

ID17040213SK002_03	Devil Creek - 3rd order segment.	26.44	MILES

Temperature, water

ID17040213SK002_04	Devil Creek - 4th order segment to mouth.	15.79	MILES

Temperature, water

ID17040213SK003_06	Salmon Falls Creek - Salmon Falls Creek Dam to Devil Creek	27.57	MILES

Temperature, water

Total Suspended Solids (TSS)

Nitrogen (Total)

Phosphorus (Total)

ID17040213SK004_02	01 & 02 tribs Cedar Creek Reservoir	29.15	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK004_0L	Cedar Creek Reservoir	971.12	ACRES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK005_02	House Creek - source to Cedar Creek Reservoir	56.6	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK005_03	House Creek - source to Cedar Creek Reservoir	10.23	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK005_04	House Creek - source to Cedar Creek Reservoir	2.58	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK006_02	Cedar Creek - source to Cedar Creek Reservoir	44.27	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK006_03	Cedar Creek - source to Cedar Creek Reservoir	3.52	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK007_02	Salmon Falls Creek Reservoir Tributaries	37.04	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK007L_0L	Salmon Falls Creek Reservoir	2653.9	ACRES

Mercury

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK008_02	China, Browns, Corral, Whiskey Slough, Player Creeks - sourc	47.57	MILES

Phosphorus (Total)

ID17040213SK008_03	China, Browns, Corral, Whiskey Slough, Player Creeks - sourc	3.22	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK009_06	Salmon Falls Creek - Idaho/Nevada border to Salmon Falls Cr	8.67	MILES

Sedimentation/Siltation

Temperature, water

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040213SK010_02	North Fork Salmon Falls Creek - source to Idaho/Nevada bor d	26.74	MILES

Temperature, water

ID17040213SK010_03	North Fork Salmon Falls Creek - source to Idaho/Nevada bor d	0.85	MILES

Temperature, water

ID17040213SK011_04	Shoshone Creek - Hot Creek to Idaho/Nevada border	11.06	MILES

Sedimentation/Siltation

Temperature, water

ID17040213SK012_02	Hot Creek - Idaho/Nevada border to mouth	28.65	MILES

Temperature, water

ID17040213SK012_03	Hot Creek - Idaho/Nevada border to mouth	3.54	MILES

Temperature, water

ID17040213SK012_03A	Hot Creek	1.68	MILES

Temperature, water

ID17040213SK012_04	Hot Creek - Idaho/Nevada border to mouth	0.11	MILES

Temperature, water

ID17040213SK013_04	Shoshone Creek - Cottonwood Creek to Hot Creek	9.28	MILES

Sedimentation/Siltation

Temperature, water

ID17040213SK014_02	Big Creek - source to mouth	38.27	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK014_03	Big Creek - source to mouth	7.18	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK015_02	Cottonwood Creek - source to mouth	36.62	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK015_03	Cottonwood Creek - source to mouth	3.56	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040213SK016_02	Shoshone Creek - source to Cottonwood Creek	55.9	MILES

Sedimentation/Siltation

Temperature, water

ID17040213SK016_03	Shoshone Creek - source to Cottonwood Creek	11.7	MILES

Sedimentation/Siltation

Temperature, water

BEAVER-CAMAS SUBBASIN TMDL 2005-08-04

ID17040214SK002_05	Camas Creek - Spring Creek to Beaver Creek	41.33	MILES

Sedimentation/Siltation

Temperature, water

ID17040214SK010_02	East Camas Creek - from and including Larkspur Creek to T13	2.43	MILES

Temperature, water

ID17040214SK010_03	East Camas Creek - from and including Larkspur Creek to T13	4.26	MILES

Temperature, water

ID17040214SK011_02	East Camas Creek - source to Larkspur Creek	9.65	MILES

Temperature, water

ID17040214SK011_03	East Camas Creek - source to Larkspur Creek	3.39	MILES

Temperature, water

ID17040214SK012_03	West Camas Creek - Targhee National Forest Boundary (T13	21.34	MILES

Temperature, water

ID17040214SK013_02	West Camas Creek - source to Targhee National Forest Boun	52.56	MILES

Temperature, water

ID17040214SK013_03	West Camas Creek - source to Targhee National Forest Boun	6.54	MILES

Temperature, water

ID17040214SK014_05	Beaver Creek - Dry Creek to canal (T09N, R36E)	15.7	MILES

Temperature, water

ID17040214SK017_02	Threemile Creek - source to mouth	23.11	MILES

Temperature, water

ID17040214SK017_03	Threemile Creek - source to mouth	1.82	MILES

Temperature, water

ID17040214SK018_04	Beaver Creek - Miners Creek to Rattlesnake Creek	8.93	MILES

Temperature, water

ID17040214SK020_03	Beaver Creek - Idaho Creek to Miners Creek	3.63	MILES

Temperature, water

ID17040214SK021_02	Beaver Creek - source to Idaho Creek	68.4	MILES

Temperature, water

ID17040214SK021_03	Beaver Creek - source to Idaho Creek	5.37	MILES

Temperature, water

ID17040214SK024_02	Huntley Canyon Creek - source to mouth	5.77	MILES

Temperature, water

17040215 Medicine Lodge TMDL Approval Date

MEDICINE LODGE SUBBASIN 2003-05-06

ID17040215SK002_04	Medicine Lodge Creek	51.18	MILES

Sedimentation/Siltation

Temperature, water

ID17040215SK003_02	Indian Creek - confluence of West and East Fork Indian Creek	10.48	MILES

Temperature, water

ID17040215SK003_03	Indian Creek - confluence of West and East Fork Indian Creek	6.04	MILES

Temperature, water

ID17040215SK006_04	Medicine Lodge Creek - Edie Creek to Indian Creek	14.72	MILES

Sedimentation/Siltation

Temperature, water

ID17040215SK007_02	Middle Creek - Dry Creek to mouth	27.36	MILES

Temperature, water

ID17040215SK008_02	Middle Creek - source to Dry Creek	12.12	MILES

Temperature, water

ID17040215SK010_02	Edie Creek - source to mouth	10.17	MILES

Sedimentation/Siltation

ID17040215SK011_02	Medicine Lodge Creek - confluence of Warm and Fritz Creeks	19.18	MILES

Sedimentation/Siltation

Temperature, water

ID17040215SK011_03	Medicine Lodge Creek - confluence of Warm and Fritz Creeks	1.83	MILES

Sedimentation/Siltation

Temperature, water

ID17040215SK011_04	Medicine Lodge Creek - confluence of Warm and Fritz Creeks	3.83	MILES

Sedimentation/Siltation

Temperature, water

ID17040215SK012_02	Irving Creek - source to mouth	13.69	MILES

Sedimentation/Siltation

Temperature, water

ID17040215SK012_03	Irving Creek - source to mouth	2.56	MILES

Temperature, water

ID17040215SK013_02	Warm Creek - source to mouth	14.87	MILES

Temperature, water

ID17040215SK013_03	Warm Creek - source to mouth	2.44	MILES

Temperature, water

ID17040215SK015_02	Horse Creek - source to mouth	8.42	MILES

Temperature, water

ID17040215SK016_02	Fritz Creek - source to mouth	15.27	MILES

Temperature, water

ID17040215SK017_02	Webber Creek - source to mouth	28.27	MILES

Temperature, water

ID17040215SK018_02	Deep Creek - source to mouth	77.1	MILES

Temperature, water

ID17040215SK018_03	Deep Creek - source to mouth	8.98	MILES

Temperature, water

ID17040215SK020_02	Warm Springs Creek - source to mouth	85.36	MILES

Sedimentation/Siltation

ID17040215SK020_03	Warm Springs Creek - source to mouth	27.53	MILES

Sedimentation/Siltation

ID17040215SK021_02	Crooked Creek - source to mouth	53.08	MILES

Temperature, water

ID17040215SK021_03	Crooked Creek - source to mouth	3.67	MILES

Sedimentation/Siltation

17040217 Little Lost TMDL Approval Date

LITTLE LOST RIVER SUBBASIN 2000-09-27

ID17040217SK002_05	Little Lost River - Big Spring Creek to canal (T06N, R28E)	5.77	MILES

Sedimentation/Siltation

ID17040217SK007_04	Little Lost River - Badger Creek to Big Spring Creek	14.14	MILES

Sedimentation/Siltation

Temperature, water

ID17040217SK009_04	Little Lost River - Wet Creek to Badger Creek	8.89	MILES

Sedimentation/Siltation

ID17040217SK010_04	Little Lost River - confluence of Summit and Sawmill Creeks	8.56	MILES

Sedimentation/Siltation

Temperature, water

ID17040217SK012_04	Sawmill Creek - Warm Creek to mouth	8.13	MILES

Sedimentation/Siltation

Temperature, water

ID17040217SK014_04	Sawmill Creek - confluence of Timber Creek and Main Fork to	7.65	MILES

Sedimentation/Siltation

ID17040217SK017_02	Main Fork - source to mouth	15.65	MILES

Sedimentation/Siltation

ID17040217SK017_03	Main Fork - source to mouth	2.69	MILES

Sedimentation/Siltation

ID17040217SK022_03	Wet Creek - Squaw Creek to mouth	8.36	MILES

Temperature, water

ID17040217SK024_02	Wet Creek - source to Squaw Creek	53.22	MILES

Sedimentation/Siltation

ID17040217SK024_03	Wet Creek - source to Squaw Creek	5.8	MILES

Sedimentation/Siltation

Temperature, water

17040218 Big Lost TMDL Approval Date

BIG LOST RIVER SUBBASIN TMDL **2004-08-03**

ID17040218SK016_02	Thousand Springs Creek - source to mouth	20.15	MILES

Sedimentation/Siltation

ID17040218SK016_03	Thousand Springs Creek - source to mouth	12.02	MILES

Sedimentation/Siltation

ID17040218SK024_05	Big Lost River - Burnt Creek to Thousand Springs Creek	21.44	MILES

Temperature, water

ID17040218SK025_05	Big Lost River - Summit Creek to and including Burnt Creek	5.43	MILES

Temperature, water

ID17040218SK026_02	Bridge Creek - source to mouth	21.49	MILES

Sedimentation/Siltation

ID17040218SK026_03	Bridge Creek - source to mouth	3.94	MILES

Sedimentation/Siltation

ID17040218SK027_03	North Fork Big Lost River - source to mouth	12.65	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK028_02	Summit Creek - source to mouth	33.33	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK030_04	Wildhorse Creek - Fall Creek to mouth	4.95	MILES

Temperature, water

ID17040218SK033_02	East Fork Big Lost River - Cabin Creek to mouth	58.56	MILES

Temperature, water

Sedimentation/Siltation — Spring and Fall exceedence of spawning temperature criteria. EPA approved a TMDL on this AU May 2004. It will be found in NTTS as an ID_UNL segment. This pollutant was added to documnet the TMDL.All aquatic life uses are and have been full support. Salmonids abundant; no Bulltrout.

ID17040218SK033_03	East Fork Big Lost River - Cabin Creek to mouth	1.9	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK033_04	East Fork Big Lost River - Cabin Creek to mouth	18.35	MILES

Sedimentation/Siltation — Spring and Fall exceedence of spawning temperature criteria. EPA approved a TMDL on this AU May 2004. It will be found in NTTS as an ID_UNL segment. This pollutant was added to documnet the TMDL.All aquatic life uses are and have been full support. Salmonids abundant; no Bulltrout.

Temperature, water — Spring and Fall exceedence of spawning temperature criteria. EPA approved a TMDL on this AU May 2004. It will be found in NTTS as an ID_UNL segment. This pollutant was added to documnet the TMDL.All aquatic life uses are and have been full support. Salmonids abundant; no Bulltrout.

ID17040218SK035_02	Star Hope Creek - Lake Creek to mouth	17.1	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK035_04	Star Hope Creek - Lake Creek to mouth	7.76	MILES

Sedimentation/Siltation

Temperature, water — Spring and Fall exceedence of spawning temperature criteria. EPA approved a TMDL on this AU May 2004. It will be found in NTTS as an ID_UNL segment. This pollutant was added to documnet the TMDL. All aquatic life uses are and have been full support. Salmonids abundant; no Bulltrout.

ID17040218SK036_04	Star Hope Creek - source to Lake Creek	3.32	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK039_02	East Fork Big Lost River - source to Cabin Creek	37.58	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK039_03	East Fork Big Lost River - source to Cabin Creek	5.35	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK041_02	Corral Creek - source to mouth	18.03	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK043_02	Warm Springs Creek - source to mouth	65.19	MILES

Temperature, water — 12/23/2009- During the development of the TMDL it was determined that the cause of the biological impairment (Cause Unknown) was elevated temperature. NED

ID17040218SK043_03	Warm Springs Creek - source to mouth	1.19	MILES

Temperature, water

ID17040218SK046_02	Antelope Creek - Spring Creek to mouth	49.58	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK047_04	Antelope Creek - Dry Fork Creek to Spring Creek	3.56	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK049_04	Cherry Creek - confluence of Left Fork Cherry and Lupine Cre	13.46	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK049_05	Cherry Creek - confluence of Left Fork Cherry and Lupine Cre	0.65	MILES

Sedimentation/Siltation

Temperature, water

ID17040218SK053_03	Bear Creek - source to mouth	5.09	MILES

Sedimentation/Siltation

Temperature, water

MEDICINE LODGE SUBBASIN — 2003-05-06

ID17040218SK030_04	Wildhorse Creek - Fall Creek to mouth	4.95	MILES

Sedimentation/Siltation

17040219 Big Wood — TMDL Approval Date

BIG WOOD RIVER WATERSHED — 2002-05-15

ID17040219SK001_06	Malad River - confluence of Black Canyon Creek and Big Woo	22.37	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK002_06	Big Wood River - Magic Reservoir Dam to mouth	62.47	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK003L_0L	Magic Reservoir	3565.72	ACRES

Sedimentation/Siltation

ID17040219SK004_05	Big Wood River - Seamans Creek to Magic Reservoir	39.46	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK005_05	Seamans Creek - Slaughterhouse Creek to mouth	5.62	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK006_02	Seamans Creek - source to and including Slaughterhouse Cre	40.3	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK006_03	Seamans Creek - source to and including Slaughterhouse Cre	4.47	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK006_05	Seamans Creek - source to and including Slaughterhouse Cre	0.21	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK008_02	Quigley Creek - source to mouth	15.9	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK011_02	East Fork Wood River - source to Hyndman Creek	40.69	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK011_03	East Fork Wood River - source to Hyndman Creek	9.66	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK015_03	Lake Creek - source to mouth	6.98	MILES

Phosphorus (Total)

ID17040219SK016_02	Eagle Creek - source to mouth	12.78	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK016_03	Eagle Creek - source to mouth	1.56	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK024_02	Warm Springs Creek - source to and including Thompson Cre	73.72	MILES

Phosphorus (Total)

ID17040219SK024_03	Warm Springs Creek - source to and including Thompson Cre	7.74	MILES

Phosphorus (Total)

ID17040219SK025_02	Greenhorn Creek - source USFS boundary.	24.67	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK025_03	Greenhorn Creek - source to mouth	4.48	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK027_02	Croy Creek - source to mouth	37.34	MILES

Sedimentation/Siltation

ID17040219SK027_03	Croy Creek - source to mouth	8.36	MILES

Sedimentation/Siltation

Total Suspended Solids (TSS)

Phosphorus (Total)

ID17040219SK028_02	Rock Creek - source to mouth	39.41	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK028_03	Rock Creek - source to mouth	9.23	MILES

Escherichia coli

Sedimentation/Siltation

Phosphorus (Total)

ID17040219SK029_02	Thorn Creek - source to mouth	59.24	MILES

Sedimentation/Siltation

Phosphorus (Total)

UPPER SNAKE ROCK TMDL (MODIFICATION) **2005-09-14**

ID17040219SK001_06	Malad River - confluence of Black Canyon Creek and Big Woo	22.37	MILES

Total Suspended Solids (TSS)

17040220 Camas TMDL Approval Date

CAMAS CREEK SUBBASIN TMDL **2005-09-30**

ID17040220SK001_05	Camas Creek - Elk Creek to Magic Reservoir	14.11	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040220SK002_02	Camp Creek - source to mouth	37.28	MILES

Sedimentation/Siltation

Temperature, water

ID17040220SK002_03	Camp Creek - source to mouth	4.79	MILES

Sedimentation/Siltation

Temperature, water

ID17040220SK003_04	Willow Creek - Beaver Creek to mouth	9.78	MILES

Temperature, water

ID17040220SK004_02	Beaver Creek - source to mouth	14.14	MILES

Temperature, water

ID17040220SK004_03	Beaver Creek - source to mouth	0.73	MILES

Temperature, water

ID17040220SK006_02	Elk Creek - source to mouth	18.45	MILES

Sedimentation/Siltation

ID17040220SK007_05	Camas Creek - Solider Creek to Elk Creek	14.44	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040220SK011_02	Soldier Creek - Wardrop Creek to mouth	15.21	MILES

Sedimentation/Siltation

Temperature, water

ID17040220SK013_05	Camas Creek - Corral Creek to Soldier Creek	10.41	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040220SK015_03	Corral Creek - confluence of East Fork and West Fork Corral	10.64	MILES

Sedimentation/Siltation

Temperature, water

ID17040220SK018_02	Camas Creek - source to Corral Creek	135.59	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040220SK018_03	Camas Creek - source to Corral Creek	18.63	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040220SK018_04	Camas Creek - source to Corral Creek	20.53	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040220SK021_03	Wildhorse Creek - source to mouth	6.97	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

ID17040220SK023L_0L	Mormon Reservoir	1583.94	ACRES

Sedimentation/Siltation

ID17040220SK024_02	Dairy Creek - source to Mormon Reservoir	28.43	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID17040220SK025_02	McKinney Creek - source to Mormon Reservoir	17.48	MILES

Sedimentation/Siltation

ID17040220SK025_03	McKinney Creek - source to Mormon Reservoir	2.26	MILES

Sedimentation/Siltation

17040221 Little Wood TMDL Approval Date

CLARK FORK/PEND OREILLE BASIN 2001-04-02

ID17040221SK006_03	Fish Creek - Fish Creek Reservoir Dam to mouth	2.67	MILES

Sedimentation/Siltation

ID17040221SK006_04	Fish Creek - Fish Creek Reservoir Dam to mouth	16.6	MILES

Sedimentation/Siltation

LITTLE WOOD RIVER SUBBASIN TMDL 2005-09-30

ID17040221SK001_05	Little Wood River	28.92	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040221SK002_05	Little Wood River - Carey Lake outlet to Richfield (T04S, R1	25.77	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040221SK006_03	Fish Creek - Fish Creek Reservoir Dam to mouth	2.67	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040221SK006_04	Fish Creek - Fish Creek Reservoir Dam to mouth	16.6	MILES

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040221SK008_02	Fish Creek - source to Fish Creek Reservoir	52.94	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040221SK008_03	Fish Creek - source to Fish Creek Reservoir	16.48	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Phosphorus (Total)

ID17040221SK008_04	Fish Creek - source to Fish Creek Reservoir	1.36	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Phosphorus (Total)

ID17040221SK014_02	Muldoon Creek -source to mouth	86.81	MILES

Temperature, water 01/28/2010 - Added by EPA January 2001. NED

ID17040221SK014_04	Muldoon Creek -source to mouth	3.53	MILES

Temperature, water

ID17040221SK022_02	Dry Creek - source to mouth	39.65	MILES

Sedimentation/Siltation

ID17040221SK022_03	Dry Creek - source to mouth	11.61	MILES

Sedimentation/Siltation

ID17040221SK023_02	Silver Creek - source to mouth	71.4	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

Appendix G. Bear Valley Creek 4b Justification

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Bear Valley Creek 4b Justification

The dorsal fin of a chinook salmon breaks the surface of Upper Bear Valley Creek (AU 12_02a).

Idaho Department of Environmental Quality
and
Lowman Ranger District, Boise National Forest

February 2011

Bear Valley Creek 4b Justification

Prepared by:

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Abbreviations, Acronyms, and Symbols

§303(d)	Refers to section 303 subsection (d) of the Clean Water Act, or a list of impaired water bodies required by this section
§	Section (usually a section of federal or state rules or statutes)
ACS	Aquatic Conservation Strategy
AU	Assessment unit
BAER	Burned Area Emergency Rehabilitation
BLM	Bureau of Land Management
BMP	Best management practice
BNF	Boise National Forest
BOISED	Boise National Forest Sediment Model
BPA	Bonneville Power Administration
BURP	Beneficial Use Reconnaissance Program
BVW	Bear Valley Watershed (including the Bear Valley Creek and Elk Creek Watersheds
C	Celsius
cfs	cubic feet per second
C&H	Cattle and Horse
CWA	Clean Water Act
CWAL	Cold water aquatic life
EPA	United States Environmental Protection Agency

EPT Order of Insects: Emphemeroptera, Plecoptera, Trichoptera

ESA Endangered Species Act

FCRONR Frank Church River of No Return Wilderness

GRAIP Geomorphic Road Analysis and Inventory Package

HUC Hydrologic Unit Code

IDASA Idaho Assessment Database Supplemental Application

IDEQ Idaho Department of Environmental Quality

IDFG Idaho Department of Fish and Game

INFISH Federal Inland Native Fish Strategy

IRG Integrated Report Guidance

km kilometer

km^2 square kilometer

m meter

m^3 cubic meter

MA Management area

mi mile

mi^2 square miles

MPB Mountain pine beetle

MPC Management Prescription Categories

NA Not assessed

NB Natural background

nd no data (data not available)

NF National Forest

NFS National Forest System (USFS road designation)

NFS Not fully supporting (IDEQ designation)

NMFS National Marine Fisheries Service (former name of NOAA Fisheries)

NOAA National Oceanic and Atmospheric Administration

ORV Outstandingly remarkable value

ORW Outstanding Resource Water

PACFISH Federal Pacific Anadromous Fish Strategy

PIBO PACFISH/INFISH Biological Opinion Effectiveness Monitoring Program

PNC Potential Natural Community

RAC Resource Advisory Committee

RCA Riparian conservation area

SBI USFS GRAIP's Stream Blocking Index

SFI IDEQ's Stream Fish Index

S & G Sheep and Goat allotment

SHI IDEQ's Stream Habitat Index

SMI IDEQ's Stream Macroinvertebrate Index

SWIE Southwest Idaho Ecogroup

SWRA Soil, Water, Riparian and Aquatic resources

T&E Threatened and/or endangered species

TEPCS Threatened, endangered, proposed/petitioned, candidate and sensitive species

TMDL Total Maximum Daily Load

USFS United States Forest Service

WARS Watershed and Aquatic Recovery Strategy

WQS water quality standard

1. Introduction

This document contains the State of Idaho and the U.S. Forest Service's (USFS) justification for Integrated Report Category 4b listings for Bear Valley Creek and Elk Creek. This demonstration is submitted to the Environmental Protection Agency (EPA) as part of the Idaho Department of Environmental Quality's (IDEQ) 2010 Integrated Report. EPA regulations recognize that alternative pollution control requirements may obviate the need for a total maximum daily load (TMDL) analysis. Specifically, assessment units (AU) are not required to be included on the Section 303(d) list if "other pollution control requirements (*e.g.*, best management practices) required by local, State, or Federal authority" are stringent enough to implement applicable water quality standards within a reasonable period of time. Waters with these alternatives to TMDLs may be included in Category 4b of a State's Integrated Report, in lieu of Category 5 (i.e. 303(d) list). Four assessment units within the Bear Valley and Elk Creek watersheds are proposed for inclusion within Category 4b of Idaho's Integrated Report, based on this document.

The IDEQ and USFS will address the following six elements as described in the US Environmental Protection Agency's (EPA) Integrated Report Guidance (IRG) for Sections 303(d), 305 (b), and 314 of the Clean Water Act (USEPA 2005:2006)

1. Identification of impaired assessment unit and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards;
3. An estimate or projection of the time when water quality standards will be met;
4. Schedule of implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

EPA lists specific circumstances in which a waterbody can be placed in section 4b of the Integrated Report (EPA 2008 IRG, specifically attachment #2). This section is for those water bodies which have already implemented some or all of certain measures that will result in attainment of water quality standards in that waterbody in a reasonable time.

The Bear Valley Watershed (BVW) includes two 5th HUC watersheds: Bear Valley Creek and Elk Creek and seven 6th HUC subwatersheds (Figure 1.1). Both the 2003 Boise National Forest Land and Resource Management Plan (Boise Forest Plan) and the updated 2010 Bear Valley Watershed Analysis (USFS 2010) contains directives to reduce nonpoint source loading to this watershed. Furthermore, the US Forest Service and its partners have implemented a substantial amount of these measures (see Appendices 1 and 2) that would have the largest benefit to water quality (rehabilitation of the dredge mining area and cessation of livestock grazing).

IDEQ's assertion is that assessment units (AU) in the Bear Valley watershed (Table 1.1) meet the above criteria. Boundaries and data for the specific assessment units will be discussed in Section 2.

Table 1.1 Water Quality Impaired Bear Valley Assessment Units proposed in 2010 for 4b Listing

Assessment Name	Stream name	Pollutant	Miles	Beneficial Uses **
17060205SL012_02a	Upper Bear Valley Creek and tribs –1st and 2nd order	Sediment	28.9	undesignated
17060205SL012_05	Bear Valley Creek 5th order	Sediment, Temperature*	11.24	undesignated
17060205SL013_03	Bearskin Creek – 3rd order	Sediment	1.83	undesignated
17060205SL013_04	Elk Creek – 4th order	Sediment	8.94	undesignated

*Temperature will be addressed in a future analysis by IDEQ.

** IDEQ presumes undesignated surface waters to support cold water aquatic life and primary or secondary contact recreation beneficial uses.

Hence forth in this document we will abbreviate the AU identifier from its 8 digit 4th order to simply its water body identification and stream order (e.g. 012_02a) in order to avoid repetition.

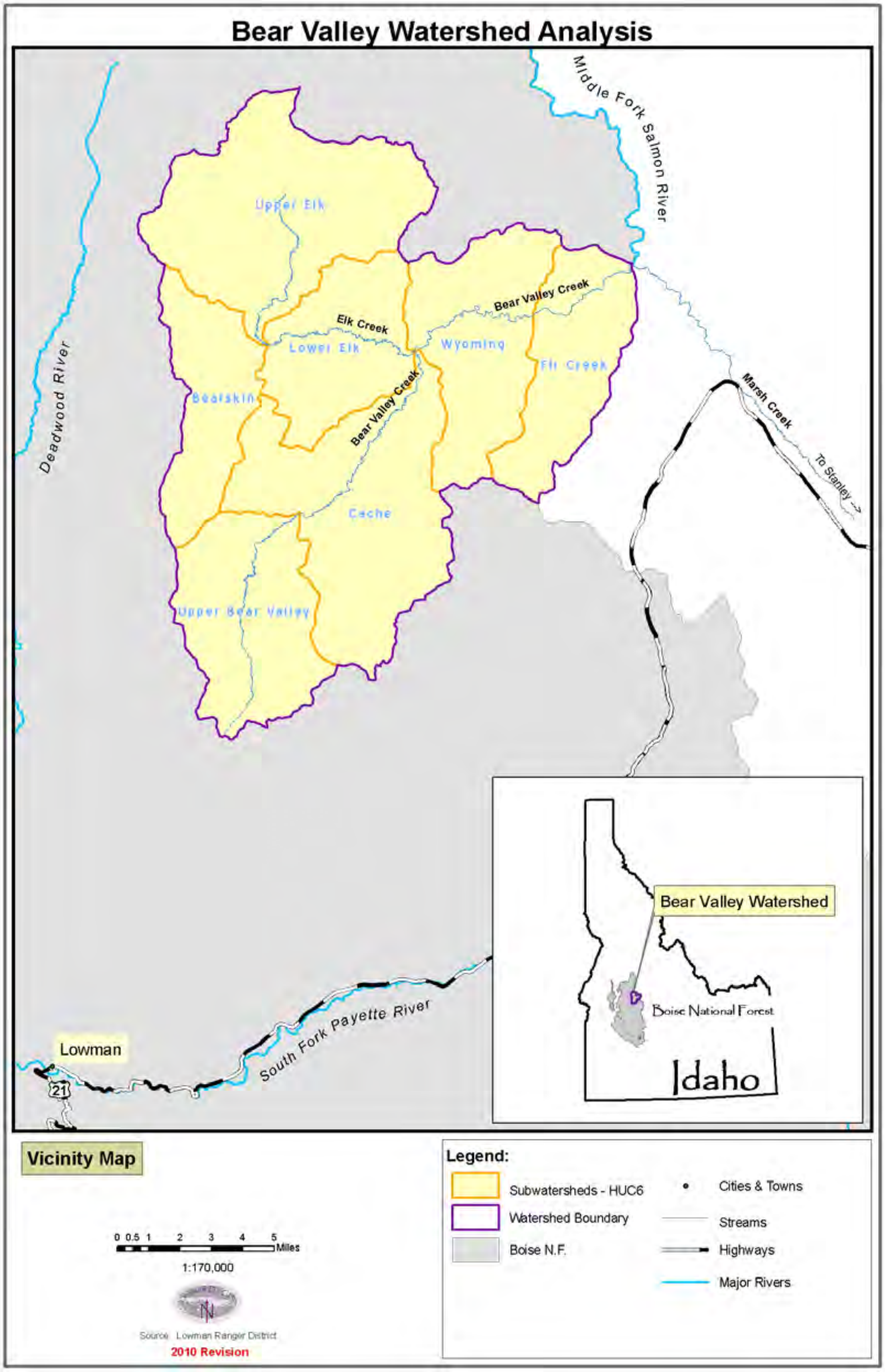

Figure 1.1 Bear Valley Watershed Area Vicinity and Subwatersheds

The Bear Valley Creek Watershed has been largely impacted by historic dredge mining activities and to a lesser extent grazing. Roads within the watershed are also a source of sediment. Impacts from recreation were identified as not being significant sources of sediment (USFS 2010). The main pollutant stressor in the watershed is sediment. Both mining and grazing have ceased in the watershed. Over the last 20 years, numerous stream improvement projects have been implemented to address water quality and aquatic habitat issues arising from the historic mining and grazing activities.

Bear Valley Creek and Elk Creek Watersheds

Bear Valley Creek flows 20 miles in a northerly direction before it joins Marsh Creek to form the Middle Fork Salmon River (Figure 1.1). This fifth order stream is an important spawning and rearing stream for Endangered Species Act (ESA) – listed chinook salmon, steelhead and bull trout. Bear Valley Creek's watershed area comprises about 23% of the Upper Middle Fork watershed and less than 4% of the entire Middle Fork Salmon River, which include two subbasins (Upper and Lower Middle Fork of the Salmon River). Its drainage area is approximately 191 square miles and contains about 393 total perennial stream miles. The high point in the watershed is 9,526 feet at the summit of Cape Horn Mountain while the low point is 6,300 feet at the mouth of Bear Valley Creek. Bear Valley Watershed is divided by Bear Valley Creek nearly down the middle. Valley sides rise moderately steep to steeply to the upland mountains. Broad valleys filled with glacial and alluvial deposits of highly erosive sandy soils and low gradient meandering streams characterize the valley bottom.

This introductory section 1 will discuss the Bear Valley Watershed (BVW) area in general (this includes Elk Creek) (Table 1.2), then characteristics specific to Elk Creek will follow in Table 1.3.

Table 1.2 Bear Valley Watershed Physical and Stream Characteristics

Parameter	Value
Channel Types Found (Rosgen 1995)	A/B/C
Area in Square miles	192
Relief in feet	3,360
Average elevation in feet	7,080
Average area slope in percent	23
Percent of area with slope greater than 30%	31
Percent of area with slope greater than 30% and north facing slope	10

Parameter	Value
Percent of area covered by forest	70
Mean annual precipitation in inches	30
Hydrologic regime	Snowmelt/Rain
Q1.5 (CFS estimated bankfull discharge)	1810
Q10 (CFS 10 year estimate of peak flow)	3200
Base flow (CFS 20 year minimum estimate of low flow in February)	70

USGS 2010

Elk Creek, part of the BVW, originates at approximately 7382 feet and is approximately 79 square miles in drainage area size. Generally, a sinuous, low gradient stream, Elk Creek meanders through meadows before flowing into Bear Valley Creek.

Elk Creek is the largest tributary to Bear Valley Creek and is roughly the same size as Bear Valley Creek when it enters Bear Valley Creek. Tributaries to Elk Creek include the North Fork, West Fork and East Forks of Elk Creek, Bearskin Creek and Porter Creek. General watershed characteristics are listed in Table 1.3.

Table 1.3 Elk Creek Watershed Physical and Stream Characteristics

Parameter	Value
Channel Types Found (Rosgen 1995)	A/B/C
Area in Square miles	79
Relief in feet	2,110
Average elevation in feet	7,010
Average area slope in percent	22
Percent of area with slope greater than 30%	20.1
Percent of area with slope greater than 30% and north facing slope	8
Percent of area covered by forest	67
Mean annual precipitation in inches	31
Hydrologic regime	Snowmelt/Rain
Q1.5 (CFS estimated bankfull discharge)	869
Q10 (CFS 10 year estimate of peak flow)	1560
Base flow (CFS 20 year minimum estimate of low flow in February)	30.8

USGS 2010

Forest Service Management Boundaries and Direction

The entire watershed is public land managed by the National Forest System (NFS). Most of the land is administered by the Lowman Ranger District of the BNF, although some road segments are administered by the Salmon-Challis National Forest.

The BVW is bordered by the Boise National Forest to the west and south, the Salmon-Challis National Forest to the east, and the Frank Church - River of No Return Wilderness (FCRONR) to the north. The watershed contains 37,576 acres of the southernmost portion of the FCRONR. This portion of the wilderness comprises 31% of the BVW and is managed by the adjacent Salmon-Challis National Forest. The Forest Service has recommended the Red Mountain area for Wilderness designation.

All or portions of seven roadless areas, totaling 29,174 acres, are within the BVW. Four of the areas are adjacent to the FCRONR. An estimated 62 percent of the area is inventoried as roadless, including all of the Blue Bunch, Poker Meadows, Nameless Creek, and Tennessee Roadless Areas, and portions of the Red Mountain, Whitehawk Mountain, and Bernard Roadless Areas.

The Boise Forest Plan (USDA 2003) identifies management areas, for which specific direction is developed. The Bear Valley management area (MA 12) lies adjacent to the FC-RONR Wilderness.

Comprehensive descriptions and details of management area prescriptions are defined in Chapter 3 of the Boise Forest Plan (USDA 2003). As a result of the 2003 Forest Plan, all the previous forest land identified as “suited timber base” was changed to “non-suited timber base. Currently, none of the BVW is included in the suited timber base for the BNF. The Management Prescription Categories (MPCs) define what types of management can occur within those lands. The MPCs for BVW are Recommended Wilderness, Wild and Scenic Rivers and their Corridors, Passive Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources, and Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources (Tables 1.4, 2.8 and Figure 1.2 and 1.3). The MPCs for BVW are described below.

<u>MPC 1.2 – Recommended Wilderness</u>

This prescription applies to areas the Forest Service recommends for Wilderness designation. The primary management objective is to maintain wilderness attributes until Congress decides to designate the areas as wilderness or release them to some other form of management. Although these areas do not fall under the authority of the Wilderness Act, they are managed to maintain wilderness attributes where feasible, and to generally allow ecological processes to prevail.

MPC 2.1 – Eligible Wild and Scenic Rivers and Their Corridors

This prescription applies to areas that are eligible orhave been Congressionally designated as Wild, Scenic, or Recreational Rivers and their associated land corridors, which extend an average of 0.25 mile from each bank. There are no Congressionally designated Wild , Scenic or Recreational Rivers within the BVW. However, portions of two eligible Wild and Scenic Rivers are within the BVW, Bear Valley Creek and Elk Creek. Bear Valley Creek is considered eligible because its outstandinly remarkable cultural resource value. Elk Creek is considered eligible because of its outstanginly remarkable wildlife value. Wild and Scenic Rivers and their corridors are managed to protect their free-flowing waters, outstandingly remarkable values (ORVs), and their classification status. A “Wild” classification is the most primitive or least developed. These rivers have essentially undeveloped corridors and are generally inaccessible except by trail. “Scenic” river corridors may have some development, and are accessible in places by roads. “Recreational” rivers are readily accessible by roads and often have development within their corridors.

MPC 3.1 – Passive Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources

This prescription is designed to minimize temporary-term risks and avoid short- and long-term risks from management actions to soil/hydrologic conditions and aquatic and terrestrial habitats. The objective of 3.1 is to keep management-related impacts from degrading existing conditions for threatened, endangered, proposed/petitioned, candidate species (TEPCS) fish, wildlife, and botanical species, or 303(d) impaired water bodies. Low levels of management activities occur, and these activities are expected to have minimal and temporary degrading effects to soils, water quality, riparian areas, and aquatic and terrestrial habitats. Other uses and activities, such as salvage harvest or Wildland Fire Use, may occur and may have some temporary effects, provided they do not retard attainment of short- and long-term objectives for aquatic and terrestrial habitat, or soil/hydrologic resources. Tools associated with this prescription—such as special order restrictions, operating plan adjustments, and prescribed fire—are typically of low intensity and designed to maintain existing conditions, primarily through ecological processes.

MPC 3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources

This prescription is designed to minimize temporary and short-term risks and avoid long-term risks from management actions to soil/hydrologic conditions and aquatic and terrestrial habitats. The objective of this prescription is to actively restore or maintain conditions for TEPCS fish, wildlife, and botanical species, or 303(d) impaired water bodies through a combination of management activities and natural processes. Management activities used to achieve this objective include watershed restoration, noxious weed treatments, and vegetative treatments that include prescribed fire, wildland fire use, and mechanical. Restoration is focused on those components of the ecosystem that are not functioning properly, or are outside the range of desired conditions, while maintenance helps to preserve those components that are functioning properly.

Active restoration is generally where capital investments and ground disturbing activities are necessary in the attempt to improve degraded systems and secure a network of connected habitats. Typically, active restoration is required where the habitat is degraded to the point that natural recovery would not be enough to get it to the desired condition or in an appropriate amount of time. Active restoration may be identified as the initial strategy or may be identified following implementation of a passive restoration, in which the degraded subwatershed was unable to recover to a desired condition and or within a desired time period. This can occur when a subwatershed has crossed a threshold during the process of degradation to a state where natural recovery may no longer be possible to a desired level or time period. The desired time period will vary from temporary (1-3 years), short term (3-15 years) and/or long-term (15 years and longer). The desired time period is based on the conditions of the watershed components, aquatic components, and associated concern for aquatic viability. To achieve restoration in such situations, active restoration may be required.

Passive restoration is where only management adjustments are required to allow aquatic habitat, water quality and subwatershed functions to restore at its natural rate of recovery. An example of passive restoration would be updating and modifying a special use permit to benefit riparian or upland conditions. Passive restoration is usually quite risk aversive regarding temporary risks to local fish habitat and populations, although long-term risks could occur if vegetation is moved out of the desired vegetation condition.

Table 1.4 Boise Forest Plan Management Prescription Categories (USFS 2003) and FC-RONR Wilderness within the Bear Valley Watershed.

Management Prescription Category	Percent of BVW
FC-RONR Wilderness	31
1.2 – Recommended Wilderness	12
3.1 – Passive Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	31
3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial, & Hydrologic Resources	26

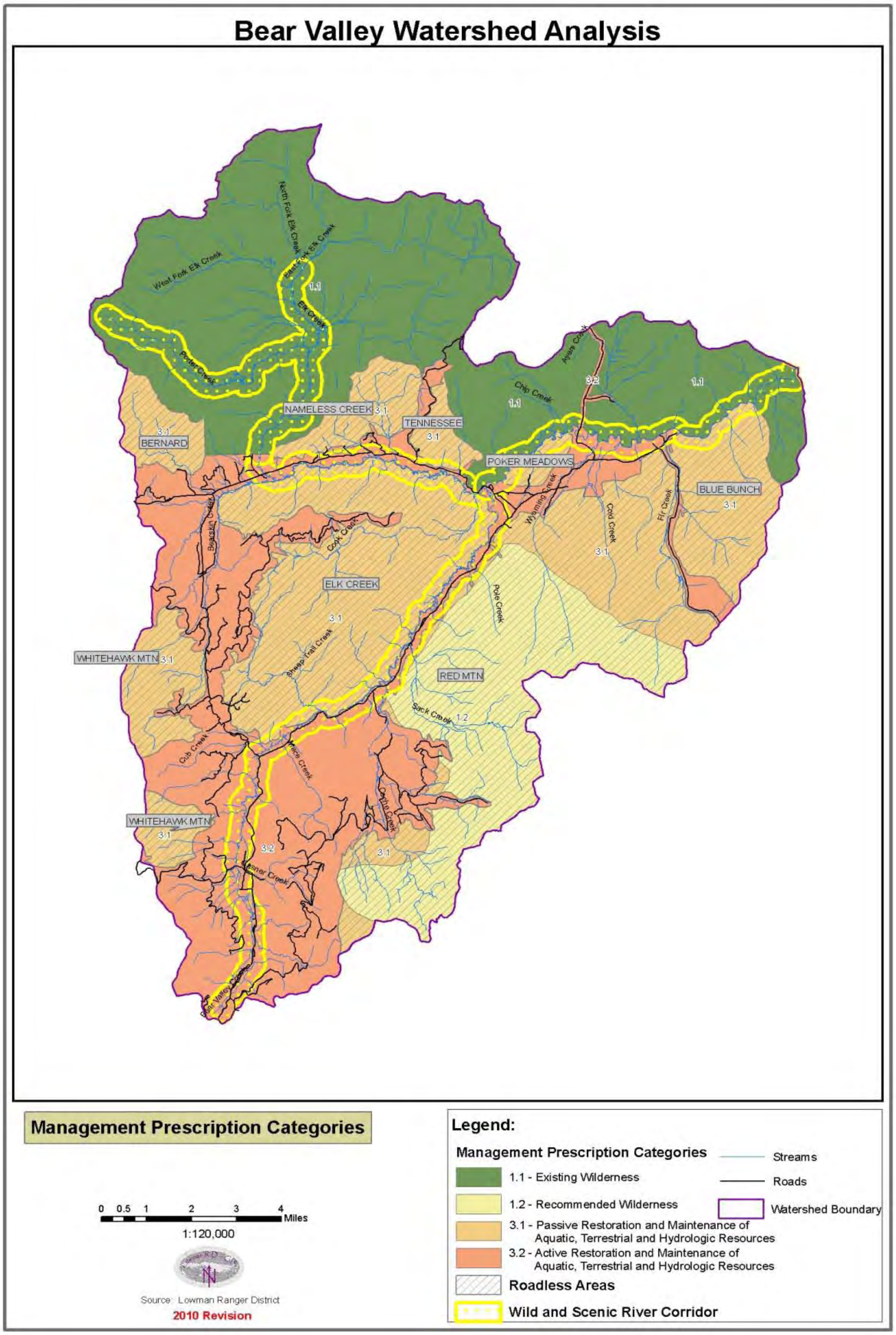

Figure 1.2 US Forest Service, Bear Valley Management Area, Management Prescription Categories

The 2003 Boise Forest Plan also developed a long-term management strategy to ensure restoration of watershed and aquatic resources on the forest, the Aquatic Conservation Strategy (ACS). The ACS provides direction to maintain and restore characteristics of healthy, functioning watersheds, riparian areas, and associated fish habitats. How these components are applied at the subwatershed and site-specific levels affects the types and outcomes of management actions and is an overriding factor that influences potential effects for Soil, Watershed, Riparian and Aquatic (SWRA) resources.

The eight ACS components are identified below. Each component is discussed in detail in the Forest Plan (USDA 2003, Appendix B), including its role in addressing reduction of threats associated with factors of decline and/or its role in a comprehensive recovery and restoration strategy for listed fish species and their habitats. Any of these components has the potential to influence any of the factors of decline or the recovery/restoration strategy.

1. Goals to Maintain and Restore SWRA Resources

    These goals reduce threats, like sediment, associated with the decline of healthy, functioning watersheds, riparian areas, and associated fish habitats.

2. Watershed Condition Indicators (WCI) for SWRA Resources

    WCIs represent diagnostic indicators of the health and trend of watersheds and associated aquatic systems. Water quality WCI includes sediment/turbidity ratings as measured by surface fines.

3. Delineation of Riparian Conservation Areas (RCAs)

    RCAs contribute to maintaining the integrity of aquatic ecosystems by (1) influencing the delivery of coarse sediment, organic matter and woody debris to streams; (2) providing root strength for channel stability; (3) shading the stream; and (4) protecting water quality.

4. Objectives, Standards, and Guidelines for Management of SWRA Resources, including Riparian Conservation Areas (RCAs)

    The management objectives, standards and guidelines reduce threats and the risks of negative effects to listed fish species, resident fish, and water quality conditions by providing protection necessary to conserve listed fish species and water quality.

5. Determination of Priority Subwatersheds within Subbasins

    Priority subwatersheds have been identified that provide a pattern of protection and restoration in the BVW for the recovery of T,E,S fish species, the de-listing of water quality impaired water bodies and the restoration and maintenance of soil, water, riparian and aquatic resources. Identification and management of the priority subwatersheds are designed to complement other recovery/restoration plans and build on actions already taking place to recover these species and de-list impaired water bodies. There are 2 ACS priority subwatersheds in the BVW; Upper Elk and Upper Bear Valley.

6. Multi-Scale Analyses of Subbasins and Subwatersheds

   The BNF completed a Forest-level, subbasin level assessment of the current condition of soil, water, riparian and aquatic resources. This included subwatershed analysis of water quality indicators, such as sediment.

7. Determination of the Appropriate Type of Subwatershed Restoration and Prioritization

   The restoration and priority categorization incorporates the subwatershed's geomorphic integrity, water quality integrity, aquatic integrity and vulnerability ratings. Figure 1.3 displays the category for each subwatershed in the BVW.

8. Monitoring and Adaptive Management Provisions

   The Boise Forest Plan is monitored every 5 years and includes evaluation of the ACS.

The ACS provides a scientific basis for the management of aquatic ecosystems; providing for a comprehensive short and long-term recovery of listed fish species; restoration of aquatic habitats and surrounding terrestrial uplands; de-listing of water quality impaired water bodies; and planning for sustainable resource management. In essence, this strategy integrates many of the goals and objectives of both the ESA and the Clean Water Act. Figure 1.3 displays the Watershed Restoration (component 5 of the ACS) and Aquatic Conservation Strategy (ACS) priority subwatersheds in the BVW. These restoration categories are used to direct all management activities in the BVW.

The Watershed and Aquatic Recovery Strategy (WARS) is largely founded on two of the eight components (#5 and 7) of the ACS. This further refinement is viewed overall as the re-establishment of a subwatersheds functions, processes, and structures, including historical ranges of conditions. The intent of the Southwest Idaho Ecogroup (SWIE) watershed restoration direction is to recognize the variability of natural systems while (1) securing existing habitats that support the strongest populations of wide-ranging aquatic species and the highest native diversity and geomorphic and water quality integrities; (2) extending favorable conditions into adjacent subwatersheds to create a larger and more contiguous network of suitable and productive habitats; and (3) restoring soil-hydrologic processes to ensure favorable water quality conditions for aquatic, riparian, and municipal beneficial uses that will contribute to the delisting of fish species and water quality limited water bodies.

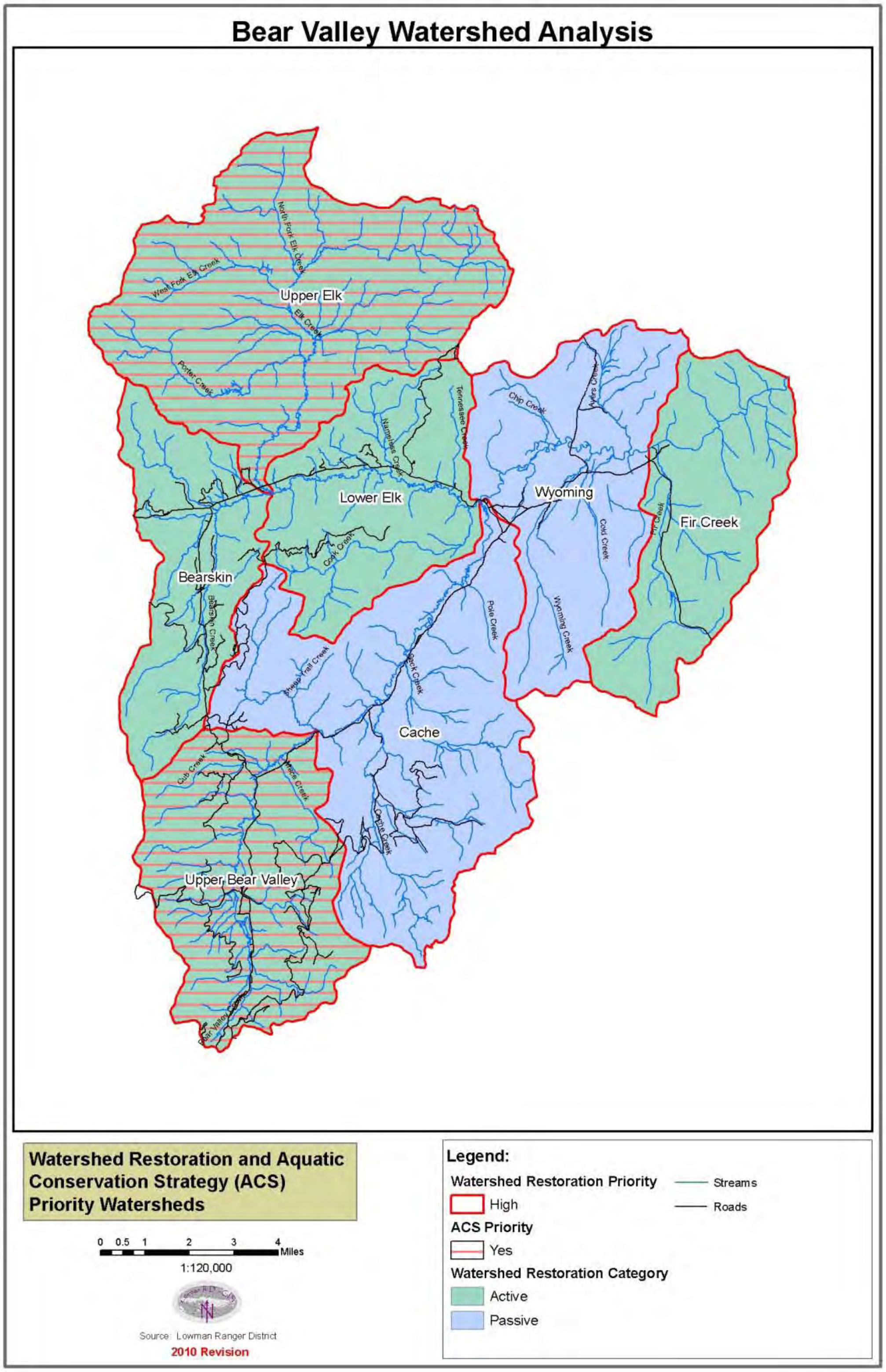

Figure 1.3 Watershed Restoration Category and Aquatic Conservation Strategy Priority Subwatersheds

Geology

The BVW lies entirely within the Idaho Batholith. Weathering, glaciations, and fluvial and hillslope erosion have shaped the granitic parent material into the variety of landforms observed in the watershed today. The deep valley fill of lower mainstem Bear Valley Creek is composed of material translocated from upland sources by glacial or fluvial processes. Near the mouth of Fir Creek, Bear Valley Creek descends through a steep, incised canyon to the Middle Fork Salmon River. These canyonlands are comprised of strongly dissected fluvial granitic lands and steep granitic canyon slopes (USFS 2000).

Hydrology

Bear Valley Creek is a perennial stream with an average gradient of 21 feet per mile. A moderately to highly sinuous creek, Bear Valley Creek has an unconfined to moderately confined channel. Oxbows and abandoned channels are evident in aerial photographs. The main valley reaches are Rosgen C3, C4 and C5 channel types (Rosgen 1985). Major tributaries include Elk, Fir, Cub, Sheep Trail, Wyoming, Sack, Cache and Casner Creeks.

Meadow and valley bottom riparian areas receive much of their water from deep seepage and interflow from upland slopes. Many of these areas become completely saturated or inundated during spring thaw, and then slowly drain during summer and fall. As water drains from these areas during summer and through mid-fall, water tables near the surface drop progressively lower.

Mean monthly streamflow for the period of record is illustrated in Figure 1.4. These streams experience peak flows related to snowmelt which occurs in the late spring and early summer months. Base flows dominate the remainder of the year. Rain and rain-on-snow events contribute an estimated 25% of the annual runoff. Groundwater influences are estimated to contribute 5% of annual runoff. Base flow in the summer is maintained by groundwater and the affects of precipitation are minimal.

Forty-seven percent of the headwater tributaries to Bear Valley Creek are source reaches, meaning that this steeper gradient (4% or greater) creek is where initial entrainment of bedload materials begins. Overall in the BVW, 41% of the stream miles are response reaches, which are the areas where transported sediment is deposited. Transport reaches only comprise about 12% of the watershed stream miles. These are intermediate gradient (1.6% to 4%) streams that function to transport material from the high gradient source reaches to the low gradient response reaches. The high proportion of response reaches makes this watershed sensitive to disturbance.

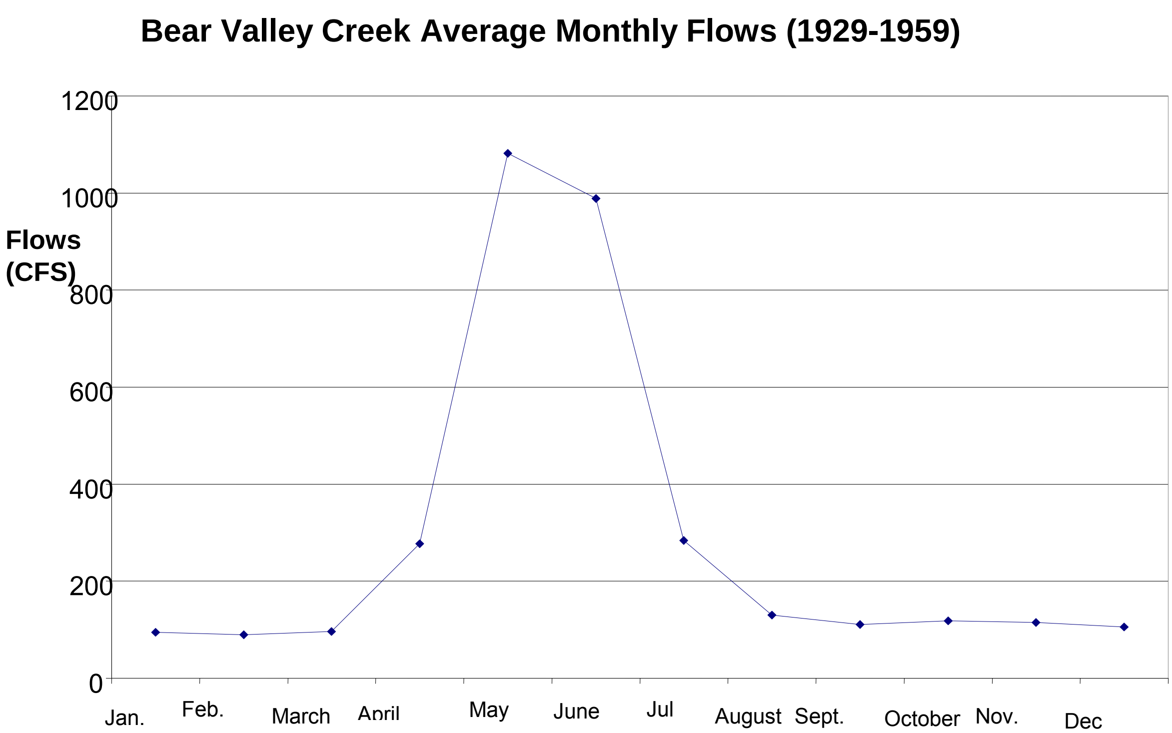

Figure 1.4 Bear Valley Creek Average Monthly Flow (USGS 2007)

Channel Characteristics

The majority of low-gradient response reaches are located in the valley bottom meadows and riparian areas of mainstem Bear Valley and Elk Creeks (USFS 2000). Floodplain and terrace landforms dominate much of the length of Bear Valley Creek along the relatively broad, unconfined main valley. Floodplain features are typically two to four times wider than bankfull width. Bear Valley Creek has a low-gradient and falls approximately 750 feet in 36.3 stream miles. It exhibits a moderate to high degree of sinuosity along much of its length. The channel is generally unconfined to moderately confined, and banks are moderately stable to unstable. The reach near the mouth below Fir Creek has a higher gradient than the meadow reach as it enters a narrower canyon before joining Marsh Creek.

The following figure (Figure 1.5) show stream gradients where the source reaches are A channels in the Rosgen (1985) classification, B channels are the transport reaches and C channels are the response reaches.

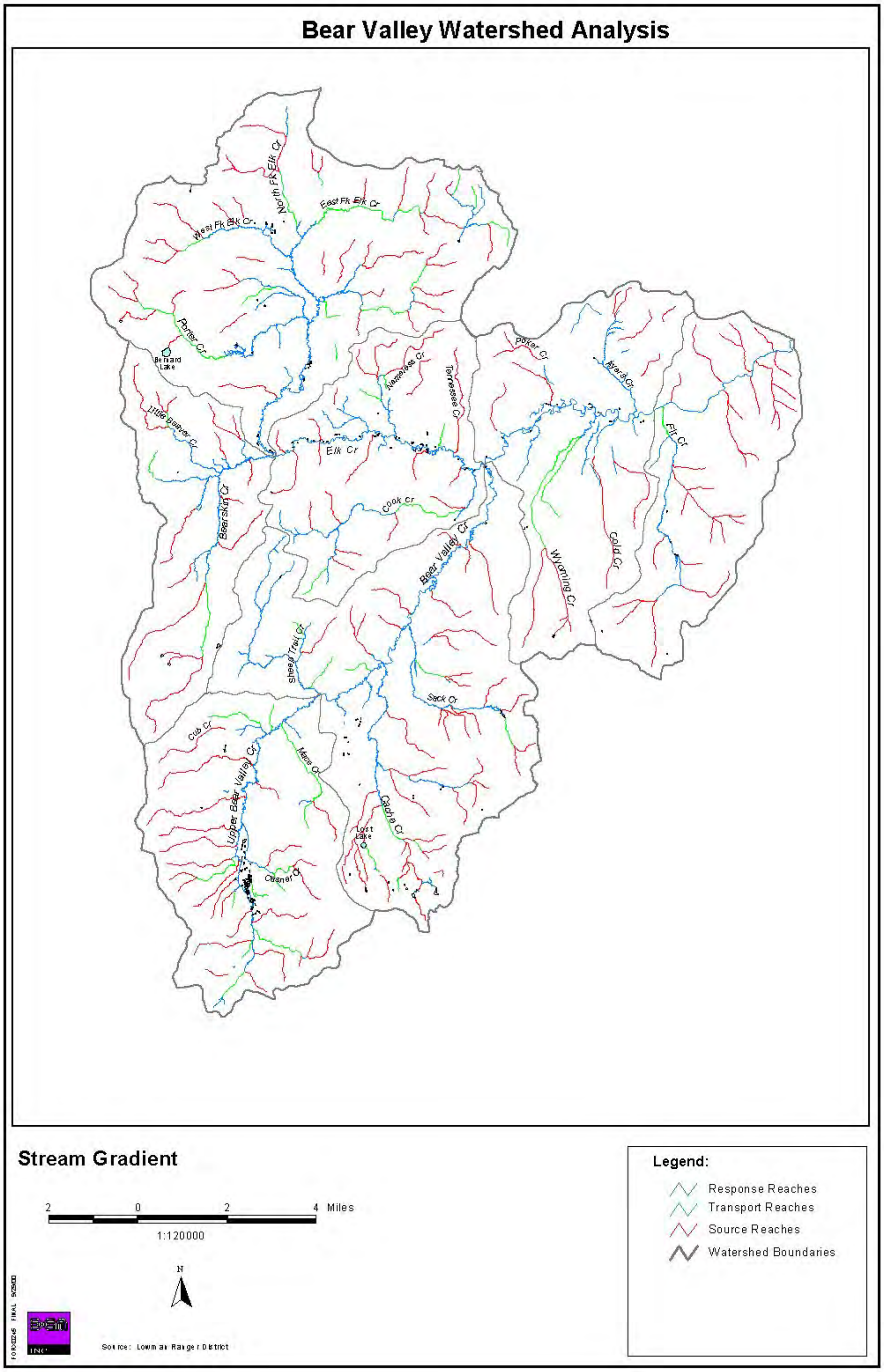

Figure 1.5 Stream gradient in Bear Valley and Elk Creek Watersheds

Between 1956 and 1959, dredge mining of private land occurred in Upper Bear Valley Creek, resulting in the obliteration of 17,000 linear feet of Bear Valley Creek and 10,000 linear feet of tributary channels. In 1969 an attempt to correct a portion of the dredged area was made. The lower reaches of Casner Creek and the dredged section of Bear Valley Creek were diverted and channelized. However, this diversion failed several times, most notably in a flood event in 1984 that resulted in massive downstream erosion and erosion of tailing materials. The 1984 event resulted in the involvement of the Shoshone-Bannock Tribes in a more comprehensive remediation project (Figure 1.10). Fortunately, the 1984 to 1989 rehabilitation effort has brought about an upward trend (USFS 2000). This summary is expanded further in the mining section.

Fisheries

The BVW is an extremely important drainage for fish resources in the entire Salmon River Basin. The spring/summer chinook salmon (*Oncorhynchus tschawytscha*) population is extremely unique because the BVW is one of the few remaining areas left that has only wild salmon, with essentially no hatchery influence. In addition, the BVW has been identified by the State of Idaho and the Forest Service as a “key” watershed (watersheds with the greatest potential for protecting and restoring bull trout populations) for bull trout (*Salvelinus confluentus*). Under the ESA of 1973 (as amended), chinook salmon and steelhead were listed as Threatened by the National Marine Fisheries Service (NMFS), and bull trout was listed as Threatened by the US Fish and Wildlife Service. The BVW contains critical spawning, rearing, and migratory habitats for wild Snake River spring/summer chinook salmon, steelhead trout, bull trout, and westslope cutthroat trout.

In 1991, NMFS received a petition to list Pacific Northwest Salmon Runs under the ESA. Spring, summer, and fall run chinook were listed as threatened species in the Salmon River basin in 1992. Snake River basin steelhead trout were listed as a threatened species in 1997. These listings of anadromous fish prompted a review of current habitat management practices on federal lands by National Oceanic and Atmospheric Administration (NOAA) Fisheries, and NOAA Fisheries issued a biological opinion (Opinion) on the adequacy of land and resource plans to protect anadromous fish habitat. One of the commitments identified in the Opinion was to monitor grazing strategies to determine if current grazing practices were meeting PACFISH riparian management objectives.

BVW is an important traditional use area for the Shoshone-Bannock and Shoshone-Paiute Tribes. The Nez Perce Tribe also has an interest in this area as well. Major fish-bearing tributaries to Bear Valley Creek include Ayers, Chip, Poker, Tennessee, Cook, Nameless, Elk, East and West Fork Elk, Little East Fork Elk, Porter, Little Beaver. In general, salmon, steelhead, westslope cutthroat, and possibly fluvial bull trout and mountain whitefish are found in mainstem Bear Valley Creek. Resident bull trout are found in upper, relatively undisturbed reaches of most tributaries. Chinook salmon and steelhead spawn and rear in mainstem Bear Valley Creek from the mouth upstream through Big Meadows/Cache Creek. Elk, Bearskin, Casner, Cub, Mace, Sheep Trail, Cache, Sack, Pole, Wyoming, Cold, and Fir creeks are also spawning and rearing areas (USFS 2000).

Historically, the watershed accounted for 49% of the chinook salmon redds in the Salmon River Basin and 65% in the Middle Fork Salmon River. Increases in sediment and loss of pool habitat are the biggest changes in the BVW from historic to current aquatic habitat conditions. Current chinook salmon and steelhead redd, parr, and smolt numbers in the BVW are less than 1% of potential historic numbers. The installation of numerous downstream dams has greatly influenced the ability for migration of the anadromous fish. Grazing and past mining activities have had the biggest impact on the local water quality and aquatic habitat.

The primary factors limiting ESA-listed fish productivity are: negative competition with introduced fish (brook trout), excess substrate fines, and local disconnection between overwintering and spawning habitats. Smolt-to-adult survivals are much lower than egg-to-smolt survivals for anadromous fishes, suggesting that factors external to Bear Valley are most limiting to productivity (USFS 2000).

Both the Shoshone-Bannock Tribes and the Idaho Fish and Game (IDFG) conduct annual surveys of chinook salmon redds. While there is some overlap in the survey dates, generally the Shoshone-Bannock Tribes' surveys are at the beginning of the spawning season and the IDFG surveys are towards the middle and end of the spawning season. IDFG results were 143 chinook salmon redds in 2009 (IDFG et al 2009), 101 in 2008, 75 in 2007, 38 in 2006, 95 in 2005, 86 in 2004, 251 in 2003, 240 in 2002, 153 in 2001 and 59 in 2000.

Fish density has shown a significant increase since the habitat restoration project in the headwaters of Bear Valley Creek (mine restoration discussed in more detail under mining). Chinook salmon were observed throughout Bear Valley Creek in 2003, and were most abundant in the second and fourth order sections. The surveys found no rainbow trout in 2003. The greatest species and age-class diversity was found in the fourth and fifth order reaches.

Spawning of steelhead and rainbow trout in the Upper Middle Fork Salmon subbasin is estimated to begin in early March and go through Mid-May. Spring/summer chinook are estimated to spawn from September to Mid-October. Cutthroat trout are estimated to begin spawning in May and end in June. Bull trout, in general, are estimated to spawn between September 1 and mid-October (Grafe et al. 2002).

Vegetation

Forest cover dominates the BVW with nearly three-fourths of the area occupied by conifer trees. Six major potential vegetation groups occur in the BVW, with five of these found in the Upper Bear Valley Creek area. They are in descending order of prevalence: warm, dry subalpine fir; persistent lodgepole pine; cool, moist Douglas fir; cool, dry Douglas fir; hydric subalpine fir. Subalpine fir vegetation, a high altitude group, is found at higher altitudes. The predominant shrubs in wet meadows are willows. Grasses and sedges are the predominant herbaceous vegetation. Non riparian meadows include a variety of forbs and grasses. Shrubs in these drier meadows include shrubby cinquefoil, currants, willows, and some sagebrush.

There is an active mountain pine beetle (MPB) outbreak in the BVW area that is causing tree mortality throughout the watershed. Lodgepole pine is the host tree for the MPB and is the most common tree species in the project area. In addition to the beetle-induced mortality, the Red Mountain Fire burned more than 26,000 acres in 2006 and the Sheep Trail Fire in burned more than 8,700 acres in 2007.

Fires

The Red Mountain Fire burned approximately 26,445 acres in the Bear Valley Watershed in 2006. The Sheep Trail Fire started in 2007 and burned around 8,701 acres in the BVW (Green 2009). Table 1.5 depicts acres burned in major wildfires in the BVW and Figures 1.6 and I.7 show the past and more recent fire perimeters.

Table 1.5 Fire History in Bear Valley (acres burned)

Fire Name	1924	1949	1957	1979	1986	1987	1989	1990	1992	2006	2007	Totals
Cache Creek		924										924
Cook Ridge				783								783
Cook Ridge							372					372
Countyline									2,572			2,572
Cub Creek			882									882
Cub Creek									2,715			2,715
Deadwood Summit						29,691						29,691
Porter Creek								891				891
Red Mountain										26,445		26,445
Sheep Trail											8,701	8,701
Tennessee Cr					935							880
unnamed	388											383
Grand Total	**388**	**924**	**882**	**783**	**935**	**29,691**	**372**	**891**	**5,287**	**26,445**	**8,701**	**71,727**

(Source: Green 2009)

In Chapter 2 (Bear Valley 4b Justification), Section 1 of this document, sediment from wildfires is discussed. Fire suppression strategies utilized in the BVW follow the “minimum impact tactics”. During the recent 2006 and 2007 wildfires, there was no road construction or bulldozer fireline construction. Fire suppression tactics utilized handline, low-impact feller-bunchers along roads, existing openings and air resources. Additionally, rehabilitation on all firelines was completed once the wildfires were declared controlled. Sediment contribution from fire suppression activities has not been observed and is estimated to be very minimal.

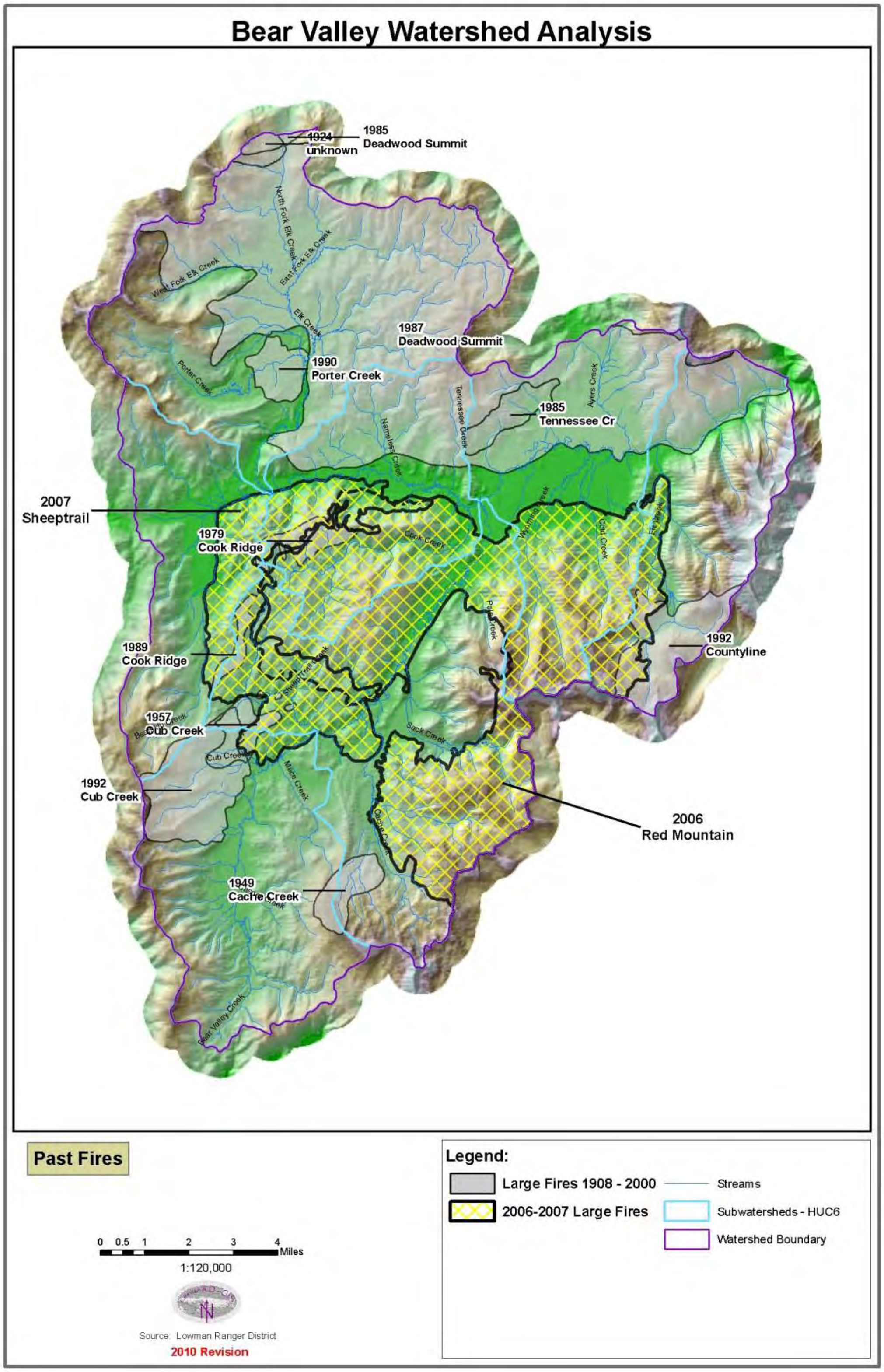

Figure 1.6 Past fires in the Bear Valley Watershed

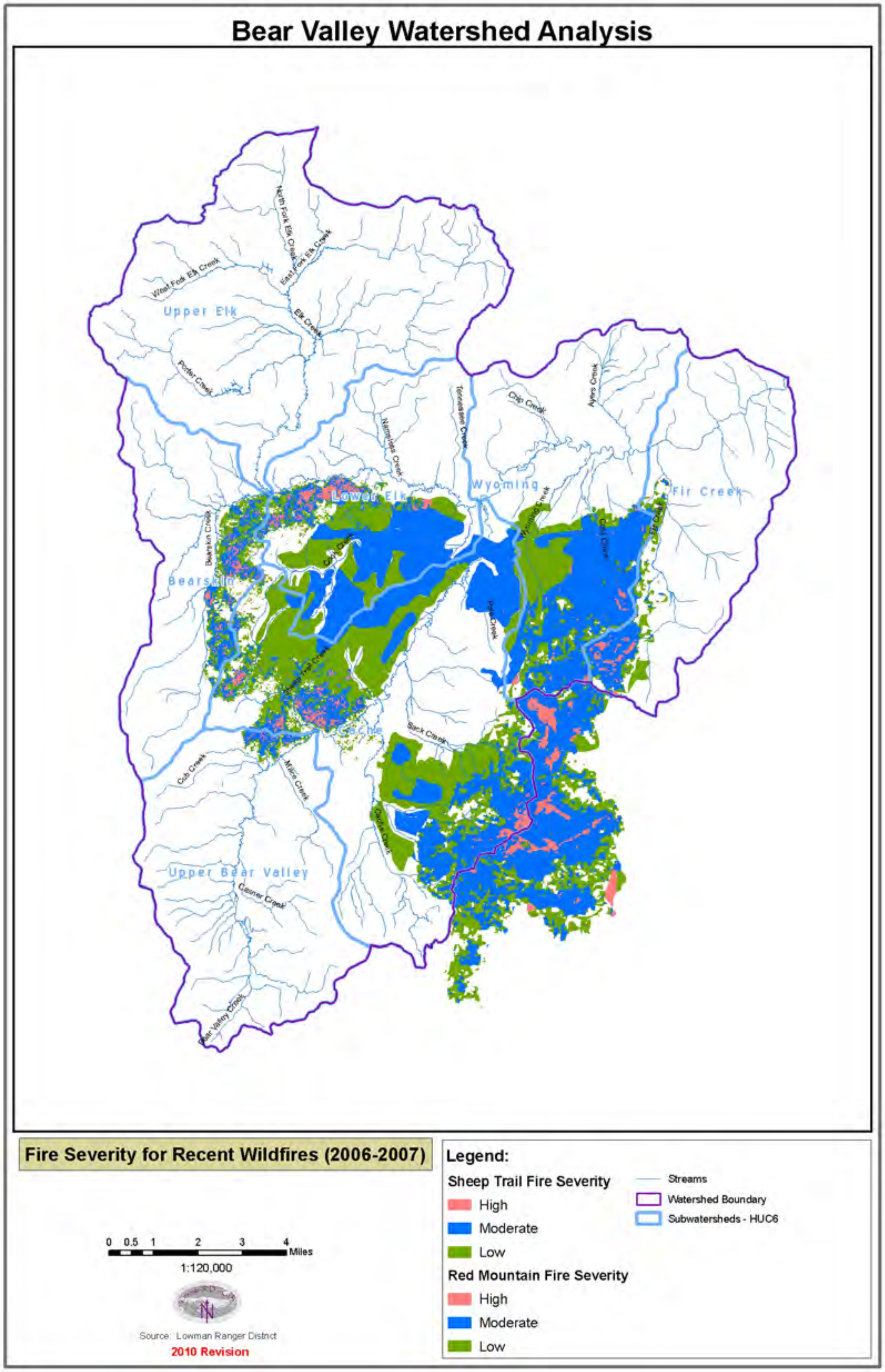

Figure 1.7 Recent Wildfire (2006-2007) Severity Class

Roads

Approximately 167 miles of unpaved Forest Service Roads*[1] exist in the BVW (Table 1.6). An estimated 36 miles are unauthorized or non-system or user-created roads and the remaining 131 miles of road are Forest roads. Roads exist in all 6th field subwatersheds, with Upper Bear Valley having the most (55 miles) and Upper Elk subwatershed having the least (4 miles) (USFS 2010).

All roads in the BVW were targeted in the road inventory. However, due to time and resource constraints certain roads were given priority based on assessments made in the field by a crew leader. All 131 miles of Forest Roads (including open, closed, or otherwise designated roads) were prioritized and successfully surveyed. Most unauthorized roads (user-created or otherwise unclassified roads) were prioritized, but not all were surveyed. Up to 21 miles of unauthorized roads were not surveyed. A total of 18 miles out of the 146 miles of surveyed roads in Bear Valley (12.5%) were hydrologically connected to a stream (Fly et al 2011).

Table 1.6 Road length, miles with a riparian conservation area and density (miles of road length per miles squared of area) for the Bear Valley Watershed by sub-watershed (HUC6).

Sub-watershed	Miles within an RCA	Total Existing Road Length (mi)	Total Area (mi^2)	Road Density (Rd mi/mi^2)
Wyoming	2.9	13	25.7	0.5
Fir Creek	2.6	6	20.2	0.3
Cache	9.7	37	40.0	0.9
Upper Bear Valley	13.0	55	26.3	2.1
Upper Elk	0.6	4	40.8	0.1
Lower Elk	2.5	21	20.8	1.0
Bearskin	5.0	31	17.6	1.7
Combined Total	**36.3**	**167**	**191.4**	**0.9**

BNF (2010)

As displayed in Table 1-6 above, road densities throughout the watershed are generally low, the highest density being in Upper Bear Valley subwatershed (2.1

[1] * Forest Roads include all National Forest System Roads and other Forest Roads which have been authorized by a legally documented right-of-way held by Valley County (36 CFR 212.1). Forest Roads do not include unauthorized roads

miles/square mile). Road 582 takes a southwesterly route along lower Bear Valley Creek and is the longest road in the BVW.

Existing roads are usually located on gentle relief; therefore, their capability to route or concentrate any surface flow resulting in sediment delivery is limited. Because of the low road density and the watershed's inherent ability to attenuate peak flows, roads have limited influence on hydrologic response at both the subwatershed and watershed scale.

Individual road segments in the northeastern part of the watershed are administered by the Middle Fork Ranger District of the Salmon-Challis National Forest. Portions of National Forest System Roads 568 and 579 are subject to the majority of traffic use in the watershed, most of which is associated with wilderness access and whitewater recreation. Users drive these routes to obtain access to the Middle Fork and FC-RONR. Consequently, administration and maintenance of Road 579 between its intersection with Road 568 to State Highway 21, as well as the entire length of Road 568, have become their responsibility (Metz pers. comm. 2000).

Recently, Valley County has claimed that the main travel routes in the watershed fall under their jurisdiction. These include Roads 579, 582, and 563. They are declared by the County to be retained in perpetuity as primary thoroughfares for public access. The remainder of FR579 from the Bruce Meadows airstrip to Deer Creek Pass (all the way to Cascade), FR563 or Bearskin Road and FR582, and FR582K is maintained and administered by Valley County through a public road easement (Aug. 22, 2005). See following map (Figure 1.8) for roads and trail.

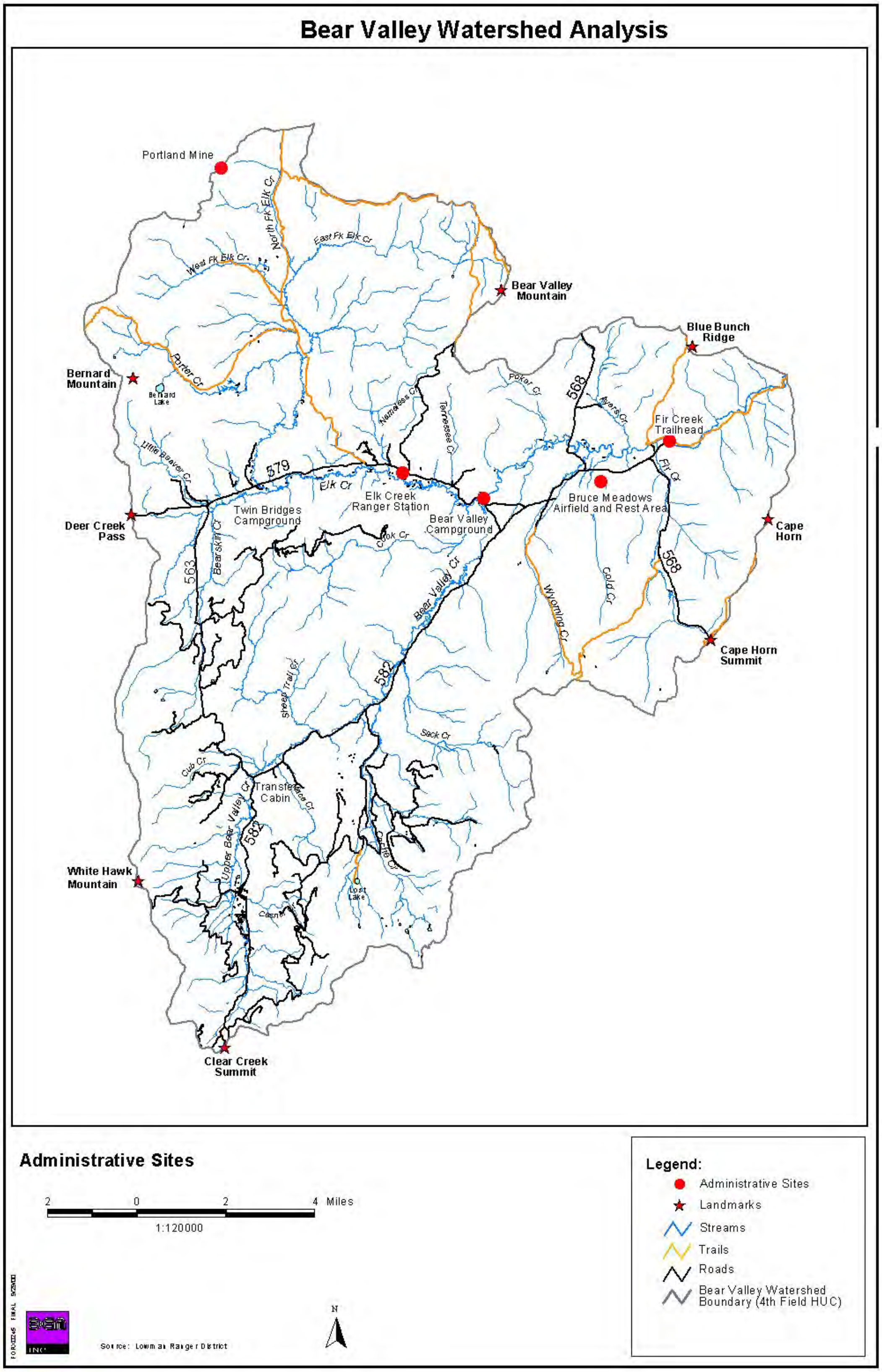

Figure 1.8 Roads and Trails in the Bear Valley and Elk Creek Watersheds

Grazing

Grazing has historically been of importance in the BVW. Early records of exact numbers and locations of livestock grazing do not exist. By 1930, there already were reports of over-grazing. The grazing section of the 1975 Land Use Plan for the Bear Valley Planning Unit concludes with this statement: “Grazing and anadromous fish do pose some conflicts. The economic value of both is important. The loss of vegetation and trampling damage caused by cattle grazing of streambanks along Bear Valley and Elk Creeks has an undetermined adverse effect on fishery values.” In the 1960s, a deferred rest rotation system of pasture management was initiated on the Bear Valley Cattle and Horse (C&H) allotment. During the mid 1960s to mid 1970s sheep grazing declined, and in 1995 the area grazed by sheep was converted into a cattle allotment (USFS 2010).

By the 1990s, there were three grazing allotments managed in the BVW: the Elk allotment, Bear Valley allotment and the Deer Creek allotment (see color coding in Figure 1.9). During the period of grazing, 6,000 feet of barriers were completed to prevent trailing of cattle along the streambanks of Elk Creek. A 4,500 acre riparian pasture was established to prevent access to critical portions of Elk Creek. While a sheep allotment still existed in the 1990s, no sheep were grazed from 1985 onwards until the allotment was retired in 2000 (Table 1.7).

With the issuance of the biological opinions for chinook salmon and bull trout in the 1990s, grazing utilization requirements became stricter and the permittees eventually opted to discontinue grazing. The Deer Creek allotment was retired in 2000, the last season of grazing occurred in 1999. No grazing has occurred in the Elk Creek drainage since 2000. The Elk Creek C & H allotment was retired in 2000. In 2001, the Bear Valley allotment was closed after its last year of livestock grazing.

In 2001, the permittees of the three allotments waived their grazing privileges to the BNF, based on payments received (to the permitees) from the Bonneville Power Association (BPA). The payments from the BPA were a result of an interagency effort to protect anadromous fish in Bear Valley. Then, the Forest Supervisor closed each of the three Bear Valley livestock grazing allotments (Deer Creek, Elk Creek and Bear Valley) to grazing.

Table 1.7 Bear Valley Watershed Grazing Management Actions

Year	Grazing Management Action
1987	Ayer's Meadow Unit of Bluebunch S & G converted to cattle and added to the Elk Creek C & H allotment
1990	Cache Creek S & G added to the Bear Valley C & H allotment
1992	Portions of Whitehawk S & G and portions of Fir Creek S & G added to the Bear Valley C & H allotment
1996	Elk Creek C & H was under an injunction. No grazing on the allotment
1999	Last year Elk Creek C & H grazed
2000	Last year Deer Creek C & H grazed, Elk Creek C & H closed
2001	Last year Bear Valley C & H grazed, Bear Valley C & H closed, Deer Creek C & H closed

S & G = Sheep and Goat, C& H = Cattle and Horse

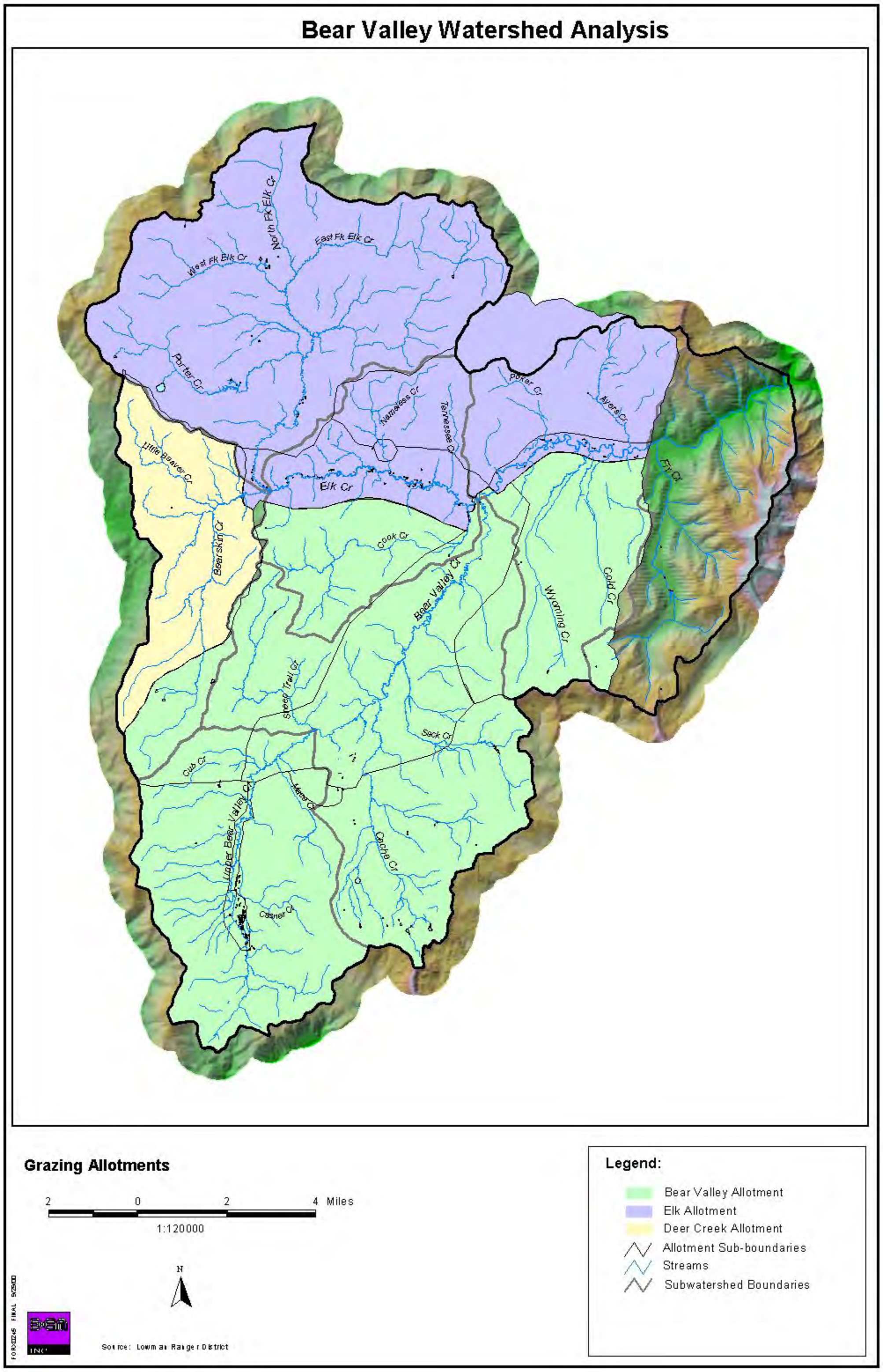

Figure 1.9 Historic Grazing Allotments

Mining

In the 1950s, dredge mining sponsored by the General Services Administration for recovery of rare earth minerals near the headwaters of Bear Valley Creek left large amounts of unconsolidated overburden along 1.4 miles of the stream's floodplain. As a result, over 17,657,333.36 ft^3 of fine sediment has entered the stream since the mining activities began. Specifically, from 1956 to 1959, a major dredging operation was undertaken on approximately 180 acres of mining claims in the upper reaches of the creek. Over the four-year period, approximately 180 acres were dredged by two floating dredges resulting in about 17,000 lineal feet of the original Bear Valley Creek channel being obliterated. The creek channel that was not obliterated by dredging was dewatered for 45,000 lineal feet. The artificial channels that were created were not suitable for salmon habitat. Since then, Bear Valley Creek has downcut through 1.4 miles of unconsolidated overburden in the mined area.

To reduce the amount of sediment entering the stream and enhance salmonid habitat, the Shoshone-Bannock Tribes initiated an enhancement effort within the mined area. During the construction phase from 1985 to 1989, the high cut banks were graded and vegetated to create a new floodplain along 1.5 miles of stream. The rehabilitation of the dredged area and the immediate surroundings was completed in 1989 at a final cost of $2.8 million. The BPA provided funding for this restoration project and the Shoshone-Bannock Tribes administered the restoration project, with participation from the Boise National Forest, other federal agencies and State of Idaho agencies. In 1989, the owners of the mineral resources sold the land to the US government (Figure 1.10). The restoration effort protects Bear Valley Creek from an additional 250,000 to 500,000 cubic yards of mining overburden that is still present in the area from entering the stream. Prior to the completion of the project, an estimated 800 to 1400 cubic yards of sediment entered the Bear Valley Creek each year from the overburden area.

Currently, there are two placer mining claims in the BVW specifically located in T11N, R8E, sections 23 and 24 (BLM Mining Claim Records 2009 http://www.blm.gov/lr2000). There has not been an operating plan submitted to the Boise National Forest to date.

As stipulated in the FCRONR Act, no dredge or placer mining is allowed in much of this management area. Locatable mineral potential is moderate to high in much of the area. Potential for leasable geothermal resources is moderate. Potential for other leasable minerals is unknown. Potential for common variety mineral materials is moderate to unknown (USFS 2003).

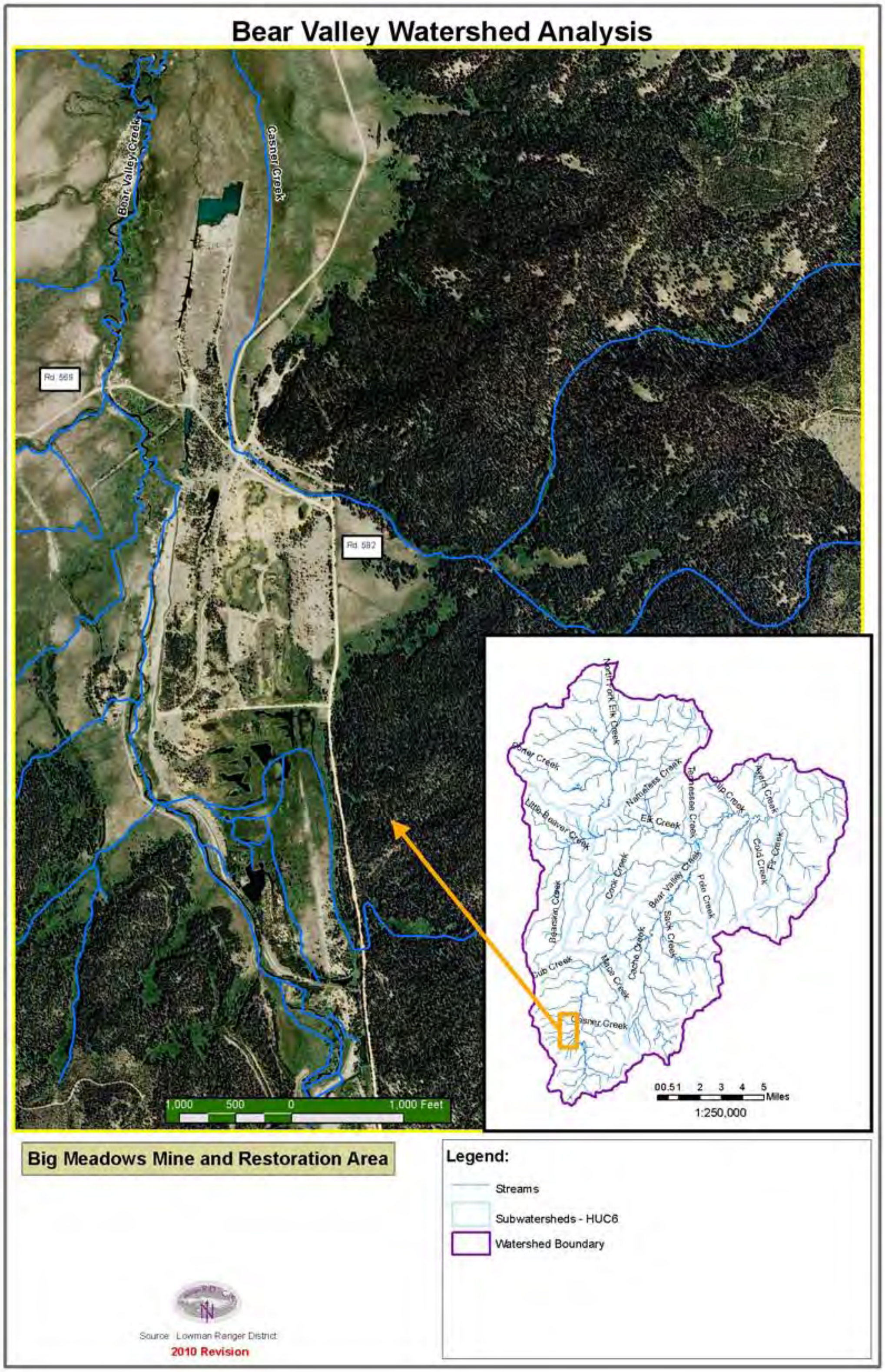

Figure 1.10 Big Meadows Dredge Mining Restoration Area, 2008.

2. Bear Valley Watershed 4b Justification

This section will address the following six elements, as they each relate to the Bear Valley Watershed and as described in the US Environmental Protection Agency's (EPA) Integrated Report Guidance (IRG) for Sections 303(d), 305 (b), and 314 of the Clean Water Act (USEPA 2005:2006)

1. Identification of impaired assessment unit and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve water quality standards;
3. An estimate or projection of the time when water quality standards will be met;
4. Schedule of implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

1. Identification of Segment and Statement of Problem Causing the Impairment including Identification of Sediment Goals

Segment Description/Impairment and pollutant causing impairment

The IDEQ has identified four assessment units proposed for 4b listing in the 2010 Integrated Report. These assessment units are differentiated based upon stream order. The second order assessment unit occupies the first and second order drainages in the headwaters region of Bear Valley Creek. The fifth order assessment unit includes the mainstem of Bear Valley Creek downstream of the confluence of Elk Creek to the confluence with Marsh Creek, which then forms the mainstem of the Upper Middle Fork of the Salmon River.

The 1st, 2rd and 5th order sections of Bear Valley Creek, the 4th order of Elk Creek and the 3rd order of Bearskin Creek comprise the four different segments that are proposed for the 2010 303(d) list section 4b as shown in Table 2.1 below. Table 2.1 also shows that beneficial uses associated with these assessment units (AU) are undesignated at this time.

Table 2.1 Water Quality Impaired Bear Valley Assessment Units proposed in 2010 for 4b Listing

Assessment Name	Stream name	Pollutant	Miles	Beneficial Uses **
012_02a	Upper Bear Valley Creek and tribs –1st and 2nd order	Sediment	28.9	undesignated
012_05	Bear Valley Creek 5th order	Sediment, Temperature*	11.24	undesignated
013_03	Bearskin Creek – 3rd order	Sediment	1.83	undesignated
013_04	Elk Creek – 4th order	Sediment	8.94	undesignated

*Temperature will be addressed in a future analysis by IDEQ.

** IDEQ presumes undesignated surface waters to support cold water aquatic life and primary or secondary contact recreation beneficial uses.

As described in Table 2.1, sediment is the pollutant of concern for the four stream AUs proposed for Category 4b waters in 2010. The 2008 IDEQ Beneficial Use Reconnaissance Program (BURP) data suggest that sediment is the pollutant most likely causing beneficial use impairment, as well as additional data collected by the Forest Service suggest that sediment could be a limiting factor for beneficial uses.

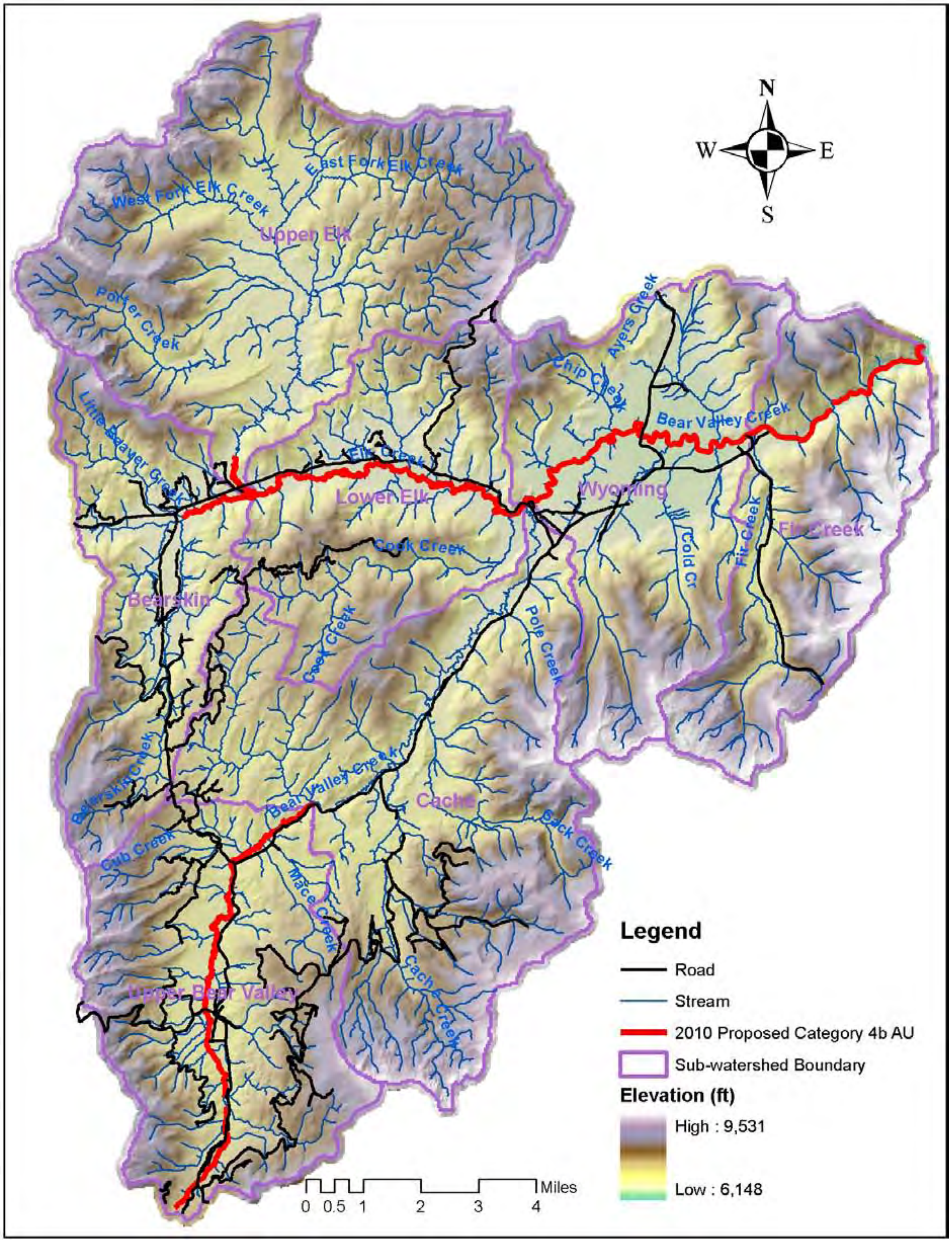

Figure 2.1 Bear Valley Watershed IDEQ 2010 Proposed Category 4b Assessment Units.

In the following sections, IDEQ BURP and USFS data are discussed that describe the AUs and the impairment within the AUs.

IDEQ BURP Data

IDEQ evaluates beneficial use support using indices for stream habitat, fisheries and insects: Biological data available for examination include macroinvertebrate, fish, and habitat data collected through BURP. The data are arranged in indices (Table 2.2 and Table 2.3) and scored to determine if the water body in question is supporting its beneficial uses. Three indices are considered when making a beneficial use support status determination. These indices are stream macroinvertebrate index, stream fish index, and a stream habitat index. The indices are classified using data collected during standardized sampling in accordance with BURP protocol (IDEQ 2007). Beneficial use support status determination is evaluated from comparison with reference conditions measured in similar bioregions. Index values are assigned based on the percentile range of the particular score in relation to the reference condition. Biological data available for examination include macroinvertebrate, fish, and habitat data collected through BURP. The data are arranged in indices and scored to determine if the water body in question is supporting its beneficial uses. Three indices, defined below, are considered when making a beneficial use support status determination.

The first index is the *Stream Macroinvertebrate Index* (SMI). By recording the abundance of macroinvertebrates known to live only in specific temperature conditions, the index is used as a direct biological measure of cold water aquatic life (Grafe et al. 2002).

The second index is the *Stream Fish Index* (SFI). This index is also considered a direct biological measure of cold water aquatic life and is used to determine how close the stream is to achieving the Clean Water Act “fishable” goal. The details of the development of this index can be found in Mebane (2000). Mebane developed this index based on least impacted and stressed sites. Fish counts are taken in each watershed and the index relates data found to known index, or reference sites.

The last index considered when determining beneficial use support is the *Stream Habitat Index* (SHI). The habitat index considers ten habitat metrics such as: instream cover, substrate composition, bank and canopy cover and zone of influence. SHI is not considered to be a direct biological measure; therefore it is recommended that it always be used in conjunction with at least one other index. This is due to significant variability in physical habitat measures (Grafe et al. 2002). Metrics tailored to forested areas were used for the SHI.

Each index uses a scale of one to three. The values resulting from each index are averaged to determine the support status of each waterbody as described in IDEQ's Water Body Assessment Guidance, Second Edition (Grafe et al. 2002). A score of three indicates the stream is most likely to fully support beneficial uses. Average values of two or greater indicate a water body that is in full support of its beneficial uses, however, the condition significantly varies from reference conditions and assessors can examine additional information, if available, to determine support status of the water body. Scores of less than two indicate that a water body is not supporting its beneficial uses. Scores from at least two indices are required to make a support status determination. As shown in the data below (Table 2.2), the first four AUs included in this 4b justification had BURP assessment scores of less than 2 in the most recent BURP survey. The second section of Table 2.2 shows AUs which fully support beneficial uses are therefore, not included in the 2010 4b listing.

Table 2.2 IDEQ BURP Scores for Bear Valley Sites

IDEQ Stream Site ID	Stream Fish Index	Stream Habitat Index	Stream Macro-invertebrate Index	Assess-ment Score	Beneficial Use Support Status
AUs Proposed for 2010 4b Listing Do Not Fully Support Beneficial Uses					
Bear Valley Creek (2 BURP Sites—scores averaged*) (012_02) 2008SBOIA035 2008SBOIA36	---	1	2	1.5	NFS**
Bear Valley Creek (012_05) 1997SBOIA063		1	1	1	NFS
Elk Creek (013_04) 2005SBOIA045	2	1	2	1.7	NFS
Bearskin Creek (013_03) 2007SBOIA138	1	1	1	1	NFS

* SMI and SHI scores were the same for both sites.

**NFS means not fully supporting beneficial uses.

Stream name	IDEQ Stream Site ID Assessment Unit	Stream Habitat Index	Stream Macro-invertebrate Index	Assessment Score
Assessment Units Fully Supporting Beneficial Uses & Not Included in the 2010 4b Listing				
Bear Valley Creek	(012_03) 2004SBOIA047	1	3	2
Bear Valley Creek	(012_04) 2008SBOIA033	3	1	2
Bearskin Creek	(013_02) 2008SBOIA037	3	3	3
Elk Creek Upper	(013_03a) 2008SBOIA038	3	2	2.5
Elk Creek Lower	(013_03a) 2008SBOIA041	3	2	2.5
Little EF Elk Creek	(013_02a) 2008SBOIA039	3	3	3
Porter Creek	(013_03a) 2008SBOIA042	3	2	2.5
Sheep Trail Creek	(014_02) 2008SBOIA034	3	2	2.5
Fir Creek	(017_02) 2008SBOIA031	2	2	2

Data source: IDEQ 2010
Note: No Stream Fish Index (SFI) on the AUs above because IDEQ did not electrofish these stream segments (beneficial use support can still be determined without the SFI).

Additional IDEQ data for Bear Valley Creek – 5th order: The 5th order AU of Bear Valley Creek (012_05) lies partly in an inventoried roadless area as well as adjacent to the wilderness area. There are no roads proximate to the creek in this assessment unit although roads cross the stream via a bridge in two locations. An IDEQ analysis of streambanks in 2007 in the 5th order section of Bear Valley Creek found that the banks were, on average, 79% stable, which while showing marked improvement since the 1990s is below the reference condition found in the natural conditions database (Overton et al 1995) of 84% stability. The natural conditions database is used only as a comparison to the current BVW conditions. Subsequently, a bank erosion hazard inventory was conducted which found that the overall erosion rate was 35 % over the reference rate. As shown in Figure 2.2, percent surface fines average 22%, meeting the Natural Conditions database reference criteria.

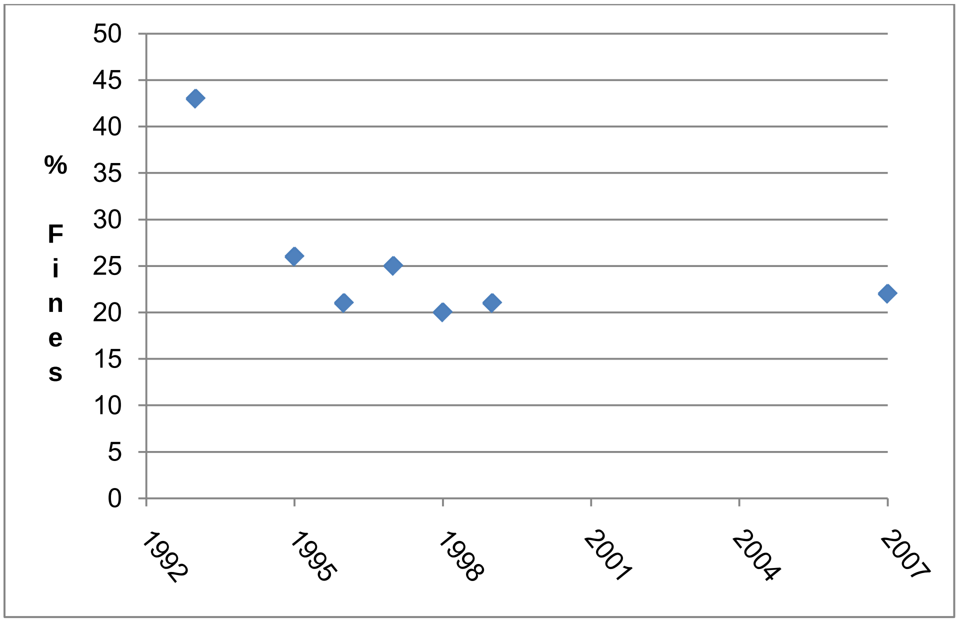

Figure 2.2 Bear Valley 5th Order % Surface Fines (IDEQ 2008)

A 2005 McNeil core survey in Bear Valley – 5th order (AU 012_05) downstream of the confluence of Bear Valley and Elk Creeks found 23% depth fines. McNeil core survey sites conducted in 2004 found average depth fines in the fifth order section of 34%. Core surveys conducted in 2001 in the 5th order section found average depth fines of 29% (IDEQ unpublished data).

Assessment Units Not Included in the 4b: In addition, data for assessments units not proposed for 4b listing is discussed in this document as the information illustrates the improving trend found in the Bear Valley Watershed. Segments not proposed for 4b justification include the following: Bear Valley Creek - 3rd order, Bear Valley Creek - 4th order, and Elk Creek - 3rd order. The IDEQ BURP scores show these assessment units were not proposed for listing in the 2010 4b listing because they are fully supporting beneficial uses (see Table 2.2). The 3rd order assessment unit (AU) of Bear Valley Creek starts at the confluence of Sheep Trail Creek and Bear Valley Creek, continuing downstream to the confluence of Cache Creek and Bear Valley Creek. The 4th order AU of Bear Valley Creek encompasses the subwatershed downstream from Cache Creek to the confluence with Elk Creek. The

3rd order assessment unit of Elk Creek includes the wilderness portion of the Elk Creek watershed, upstream of the confluence with Bearskin Creek.

Table 2.3 303(d) Listing History in Bear Valley and Elk Creeks

Assessment Unit	Stream name	Included in 2010 4b	Pollutant	Miles
012_02a	Upper Bear Valley Creek - 1st and 2nd order	Yes	Sediment	28.9
012_03	Bear Valley Creek- 3rd order	No	Sediment	2.1
012_04	Bear Valley Creek – 4th order	No	Sediment	7.4
013_03	Elk Creek – 3rd order	No	Sediment	5.1

The AUs listed in Table 2.3 are streams that have been included on past Section 303(d) lists. All but one AU, Bear Valley – 2nd order, are excluded from this 4b because IDEQ has determined that the AUs meet beneficial uses. In 2004, an IDEQ BURP assessment near Cache Creek showed that AU 012_03, fully supported beneficial uses (Table 2.3) and is not included in this Category 4b justification. This AU is proposed for delisting in the Middle Fork Salmon TMDL. The 4th order of Bear Valley Creek AU was determined to be meeting beneficial uses through BURP surveys in 2008 and the resulting index score of 2. The 3rd order of Elk Creek is mostly within the wilderness and was determined in 2008 also to meet beneficial uses, with a BURP assessment score of 2.5.

PIBO Data

The Forest Service's PACFISH/INFISH (USFWS 1998) (see glossary for definition) Biological Opinion (PIBO) Monitoring Effectiveness Program has collected stream habitat data in the Bear Valley Watershed since 2001. When compared to reference sites in the Upper Columbia River Basin, the PIBO data shows that fine sediment is high for the streams measured in the BVW.

The PIBO program started in 1998 when an interagency team of resource specialists convened to develop a plan that would monitor the effects of land use activities on aquatic and riparian resources. There were three components of the plan:

implementation monitoring, effectiveness monitoring, and validation monitoring. The PIBO group is responsible for managing the "effectiveness" monitoring component of the PACFISH/INFISH/Bull trout/steelhead monitoring plan (USFS and BLM 1995). The PIBO group's published monitoring plan gives a complete discussion of the program development and study plan (http://www.fs.fed.us/biology/fishecology/emp/).

The original PIBO study area is within the upper Columbia River basin and includes Forest Service lands within INFISH and PACFISH, and BLM lands within PACFISH or containing bull trout. A pilot study was started from 1998 to 2000 which concluded that the approach was logistically feasible, site conditions were successfully measured, and provided an effective foundation to guide future sampling efforts. In 2001, PIBO began the first 5-year sampling cycle. Approximately 125 subwatersheds were sampled in 2001 and in 2002 at half implementation. Full implementation began in 2003, which includes sampling 250 subwatersheds per year. An additional 50 subwatersheds (sentinel sites) are sampled annually to identify the effects of climate variability. In 2006 reaches were sampled that were originally sampled in 2001. Since then, the PIBO group has completed a number of analyses to address the objective of assessing change in resource conditions given current land management practices. Preliminary data analyses are available in annual reports (http://www.fs.fed.us/biology/fishecology/emp/).

One of PIBO's sentinel sites is established in Bearskin Creek AU (013_03) in the Elk Creek watershed. This site has been monitored annually, using the PIBO protocol described in Heitke et al (2008). Additionally, in 2006 and 2007, PIBO collected habitat data in the Bear Valley Creek –5th order AU (012_05) and the Elk Creek – 4th order AU (013_04). Table 2.4 displays a summary the percent fine sediment and bank stability data collected by PIBO within each Assessment Unit.

Table 2.4 PIBO Bank stability and Percent fines data (2001-2009), (PIBO 2009)

Assessment Unit	Stream	Year	Bank Stability (%)[1]	Percent Fine Sediment (< 6mm)[2]	Predicted Percent Fine Sediment[3]
Bearskin Creek– 3rd order	Bearskin	2001	100	ND	
	Bearskin	2002	91	72	
	Bearskin	2003	93	84	
	Bearskin	2004	98	95	
	Bearskin	2005	95	70	
	Bearskin	2006	95	84	
	Bearskin	2009	95	71	
	Average		***95***	***79***	***64***
Elk Creek – 4th order	Elk 3	2006	95	13	
	Elk 3	2007	100	ND	
	Average		**98**	**13**	**11**
	Elk 4	2006	86	65	
	Elk 4	2007	79	ND	
	Average		**82**	**65**	**7**
	Elk 5	2006	91	17	
	Elk 5	2007	93	ND	
	Average		**92**	**17**	**1**
Bear Valley Creek- 4th order	Upper Bear Valley 2	2006	98	12	
	Upper Bear Valley 2	2007	91	ND	
	Average		***95***	***12***	***10***
	Upper Bear Valley 3	2006	95	ND	
	Upper Bear Valley 3	2007	100	ND	
	Average		***98***		***4***
Bear Valley Creek-5th order	Lower Bear Valley 1	2006	83	ND	
	Lower Bear Valley 1	2007	98	ND	
	Average		***90***		

[1] -*Bank Stability:* Percent stable banks were calculated using method of dividing 3 variables (number of covered stable, uncovered stable, and false bank measurements) by the total number of measurements.
[2]- *Percent Fines:* Percent Pool tail Fines < 6mm.
[3]- Predicted fines : Averaged by site, not by year. Predicted surface fines (%), using the regression equation in Table 2.6
ND = No Data or insufficient data available

Streambank stability in Bearskin Creek remained above 90% in the seven years of habitat data collection by PIBO. The Elk Creek 4th order AU was surveyed two years, with ranging from approximately 79% stability to 100% stability in 2006 and 2007 surveys. The Bear Valley 4th order AU (not an AU proposed for Category 4b) also remained over 90% stability. The Bear Valley 5th order AU ranged from 83% to 98% stability in 2006 and 2007 respectively.

Fine sediment, as measured by the PIBO survey, is high (and the highest measured) in Bearskin Creek (ranging from 70% to 95%) and lowest in the 4th order AU of Bear Valley Creek (one year, measured at approximately 12% fines). Data is not available for several sites in 2007.

Photograph 2.1 Bearskin Creek, PIBO Monitoring site. 2007. *Low gradient, meandering stream. Although fine sediment is high, streambanks are mostly vegetated and stable.*

In 2010, the PIBO group developed an index of physical aquatic habitat condition using physical stream habitat and landscape data from reference reaches (Al-Chokhachy et al 2010). Reference reaches, as defined by PIBO monitoring protocols, include both wilderness areas and watersheds where there was no permitted livestock grazing in the last 30 years, minimal timber harvest (<10%), minimal road density (0.8 mi./mi^2) at the watershed scale and no roads within the proximate (0.62 mile) riparian buffer, and no evidence of historic mining within riparian areas (Kershner et al. 2004). This index approach can be used to monitor the status of the overall condition of physical habitat while accounting for natural variability and geoclimatic differences among reaches. The habitat index incorporates landscape and climatic covariates into multiple linear regression analyses to control for inherent differences in physical habitat attributes among reaches, and scores the overall condition of reaches with index scores ranging from 0 to 100, with 100 being closer to reference conditions (Al-Chokhachy et al, 2010). The regression model used to score percent fine sediment incorporated drainage area, stream gradient, precipitation, drainage density and dominant geology as covariates (Table 2.5). Incorporating the five covariates helps to explain approximately 36% of the variability among sites. Figure 2.3 displays the use of the index approach, specifically for percent fine sediment, comparing Bear Valley streams with the approximately 250 PIBO reference site in the Upper Columbia River Basin.

Table 2.5 PIBO habitat index approach: Regression model used to score percent fine sediment (Al-Chokhachy et al 2010).

Attribute	Regression model[a]	Adj. R^2
Percent fine sediment (<6mm)[b]	0.76 – 0.004*(area) – 0.11*(grad) – 0.19*(precip) + 0.12*(drainage den) + 0.09*(ign)	0.36

[a]Area is catchment area,(km^2), precip. is average annual precipitation (m), drainage den is the density of streams within the catchment (km/km^2), ign. is a categorical variable denoting the dominant geology is or is not igneous, grad is reach gradient (%)
[b]Transformed using arcsine square root.

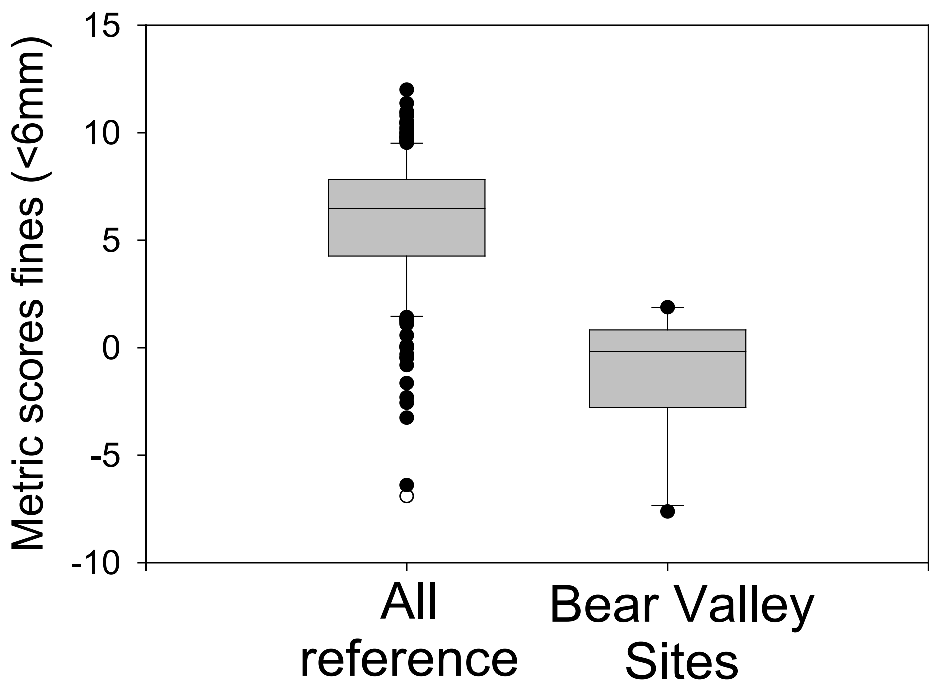

Figure 2.3 PIBO data: Percent fine sediment (<6mm) metric score for Bear Valley streams compared to all reference sites in the Upper Columbia River Basin[2].

[2] The box and whisker plot can be read as follows: the bottom and top of the box are always the 25th and 75th percentile (the lower and upper quartiles, respectively), and the band near the middle of the box is always the 50th percentile (the median). The whiskers (lines extending out of the box) represent the 10th and 90th percentile. Any data not included between the whiskers is plotted as an outlier with a dot.

Figure 2.3 displays that the Bear Valley managed sites score substantially lower (i.e. more departed) in the percent fine sediment metric score than the reference sites used for comparison. This data show that fine sediment is a concern in the Bear Valley area. Bearskin Creek (PIBO sentinel site) makes up the majority of the data used for this comparison. Additional PIBO data is available for the Bearskin site, namely temperature and macroinvertebrates.

Macroinvertebrates can be utilized as a useful indicator for biological integrity (Hawkins 2006). For the Bearskin site, the percent of "clingers"[3] was chosen as a representative measure of the macroinvertebrate data (Figure 2.4). The percent of clingers would be expected to decrease with increasing habitat perturbation. Similar to the percent fine sediment metric score, the percent clingers in Bearskin Creek are much lower than both the Boise National Forest reference and managed sites (Figure 2.4). Additionally, stream temperature was analyzed to determine if temperature may be a factor limiting macroinvertebrates in Bearskin Creek. The maximum weekly maximum stream temperatures range from 56^{o}F to 59^{o}F at the Bearskin site from 2001 through 2009. (PIBO unpublished data). This temperature range is not excessive; suggesting the fine sediment is high in Bearskin Creek and may be the limiting factor for the macroinvertebrate population. Though fine sediment is high in Bearskin Creek, stream channel condition is good (stable, vegetated banks) and stream gradient is low, as shown in Photograph 2.1. The amount of high sediment in the watershed may be a combination of natural high sediment loads and low stream gradients (41% response reaches) combined with past management activities that have yet to completely process.

[3] Macroinvertebrate behavior designation includes those organisms able to remain stationery on bottom substrates in flowing waters.

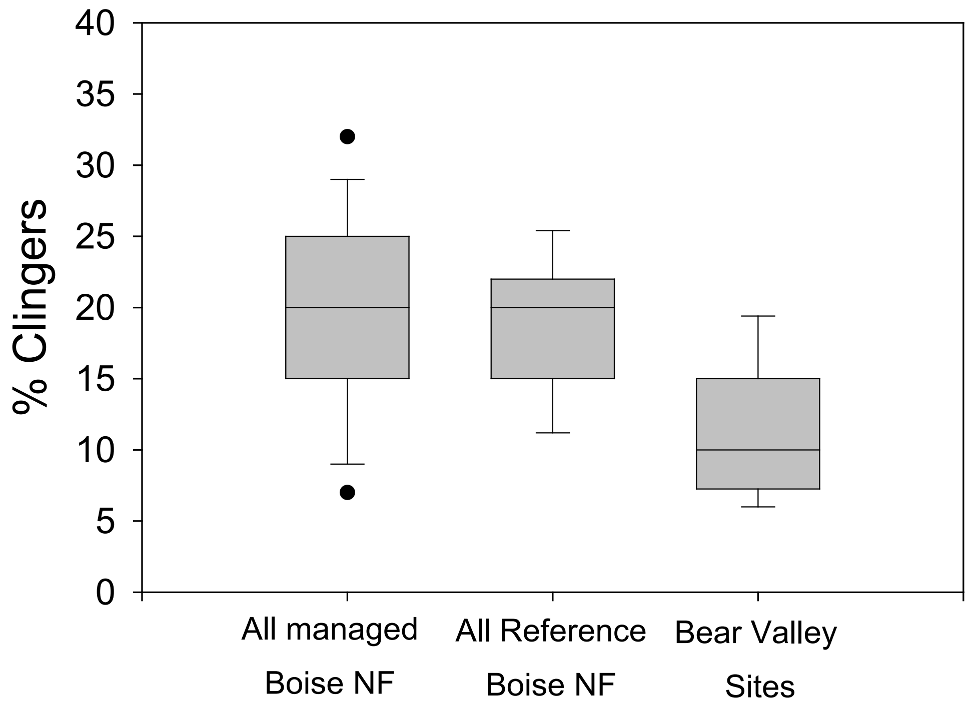

Figure 2.4 PIBO Macroinvertebrate Data for the Boise National Forest: Managed sites, Reference Sites and Bear Valley Sites (only Bearskin Creek)

Boise National Forest Bear Valley Riparian Monitoring Data

The Bear Valley monitoring program was designed to address issues related to livestock grazing in relation to water quality, riparian and aquatic habitats for chinook salmon, listed as threatened under the ESA. Bear Valley has experienced a long history of livestock grazing. The numbers of livestock gradually declined over the years and grazing management increased dramatically in the 1990s through 2001. The BNF monitoring program was instituted in 1994 and continued almost annually until 2001. This program monitored riparian condition at 23 sites. By 2001, grazing had ended and monitoring ceased. To assess the effects of non-grazing, a sample was collected at a subset of seven monitoring sites in 2008 (Burton 2010). The seven sites were chosen to represent a cross-section of pastures grazed at varying levels of intensity during the 1990s. The following paragraphs describe the results of the 2008 survey.

With respect to livestock grazing, the 2008 monitoring report (Burton 2010) found there is little evidence that the absence of livestock during the seven years immediately before the 2008 sample indicated a positive trend in riparian indicators.

For the most part, riparian indicators were the same in 2008 as compared with 2000 and 2001. There was a decline in bank stability during the late 1990s at some of the sites, but declines were also indicated at the reference sites (Fir and Porter creeks). This late 1990s decline may be due in part to a shift in the way bank stability was classified. Of greater interest are the trends in substrate indicators prior to 2000. As shown in Figure 2.5 , a least-squares fit to the averages for the monitoring sites prior to the year 2000 compared to all years shows a much steeper decline in the earlier time period. The substrate data suggest that much of the improvement to Bear Valley streams occurred during the years of intensive livestock management. By the end of the decade when all grazing ceased, little improvement has occurred. The same cannot be suggested for the other riparian indicators. Bank stability, for example, generally declined during the 1990s and then recovered slightly during the 2000s. Ecological status remained essentially static through the years. Winward stability rating increased over all years, but the 1990s did not see as steep a trend in the 1990s compared to the 2000s.

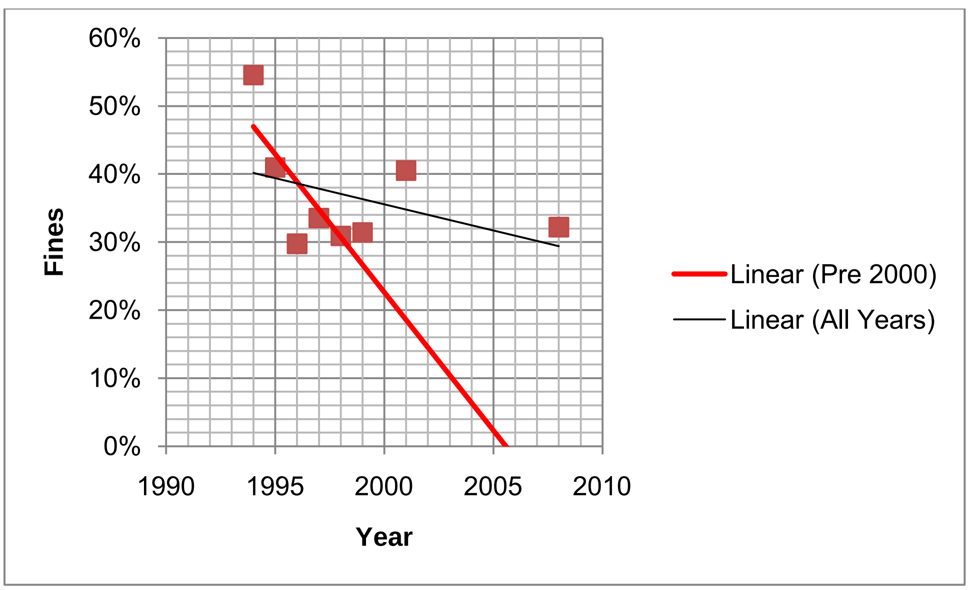

Figure 2.5 Trends in percent fines (least squares line fit) for monitoring sites in Bear Valley showing a steeper trend for years prior to 2000 than for the all years through 2008 (Burton 2008).

Trends in riparian indicators in Bear Valley Watershed may partly reflect the effects of streamflow on the streambank and riparian vegetation. Snow water equivalent, as measured at Banner Summit (NRCS Snotel site) (USDA 2010), shows and increasing trend during the mid and late 1990s with a decline in the 2000s (Figure 2.6). These trends are consistent with the decline in bank stabilities and substrate fine sediments during the 1990s. The fact that fine sediments remained low in 2008, and bank stabilities recovered slightly by then suggests that the absence of additional land disturbance factors may have helped maintain these conditions in 2008. These higher snowpack conditions and resulting increased streamflows may also explain the increases in ecological status and Winward stability rating (defined below and in glossary) in the late 1990s with a slight decline by 2008 (Winward 2000).

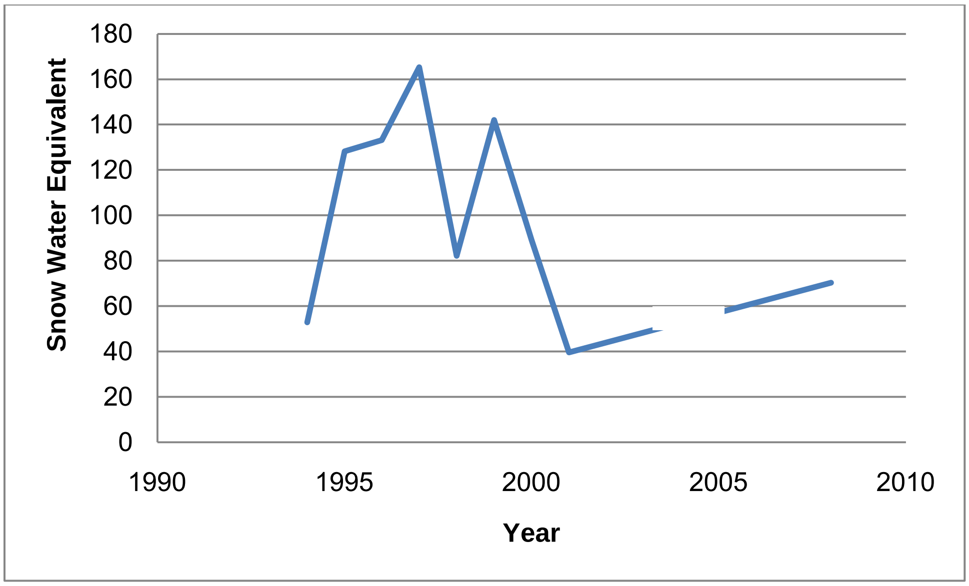

Figure 2.6 Snow water equivalent (inches) at the Banner Summit Snotel Station for years 1994 to 2001 and 2008, analogous to the monitoring years in Bear Valley (USDA SNOTEL 2010).

The condition of riparian indicators was generally lower than that for the reference sites. Many of those differences are statistically significant for Bear Valley and Elk Creeks. The tributaries are comparable to, or even better than the reference sites (e.g. ecological status). Conditions are summarized below:

> *Bank Stability*: Bear Valley Creek was variable from 70 to 90% and Elk Creek from 60 to 85% over all the years. Tributaries were in the 80s and references from 80 to 100%. The PACFISH riparian management objective for salmon streams was 80% and the PACFISH Biological Opinion of 1995 (USFS and BLM 1995) increased the objective to 90%. Because the bank stability protocol had a poor precision of plus and minus 10%, the variability at the reference sites – 80 to 100% may at least partly reflect observer error, and likely also the imprecision associated with the shift in the protocol during the mid 1990s (Figure 2.7).

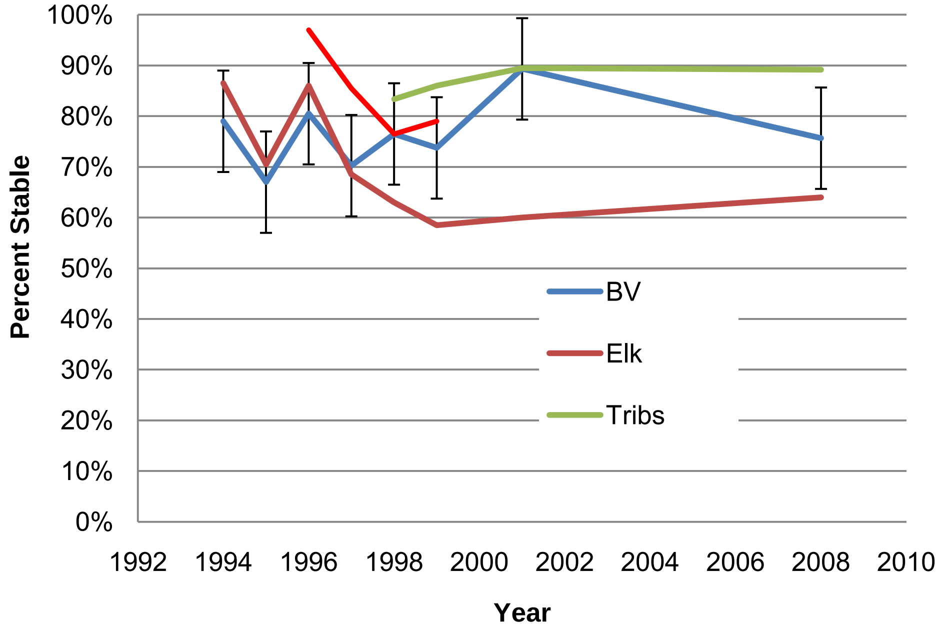

Figure 2.7 Trends in average streambank stability at monitoring sites on Bear Valley Creek (BV), Elk Creek (Elk), and tributaries (Tribs) as compared with trends at the reference sites Porter Creek and Fir Creek. Confidence intervals (vertical error bars) are shown for Bear Valley Creek indicating that the upward trend is not significant given the imprecision of the earlier methods (Burton 2010).

Greenline Vegetation Winward stability rating: Winward Stability Rating historically referred to as the vegetative stability rating, estimates the contribution of the roots of streamside vegetation to bank stability. Species have varying abilities to resist erosion based upon their rooting characteristics, both density and depth or extent. A good description of this rating is contained in the Rocky Mountain Research Station publication General Technical Report 47 (Winward 2000). The ratings for Bear Valley and Elk Creeks fall mostly in the “Mid” stability class and for the tributaries and references in “High” stability class. However the confidence interval on this rating makes it difficult to definitively conclude that vegetation stability is actually in or below either class. This is because most of the ratings fall in the 6.0 to 7.0 range and the change from “Mid” to “High” is at 6.5 (Figure 2.8).

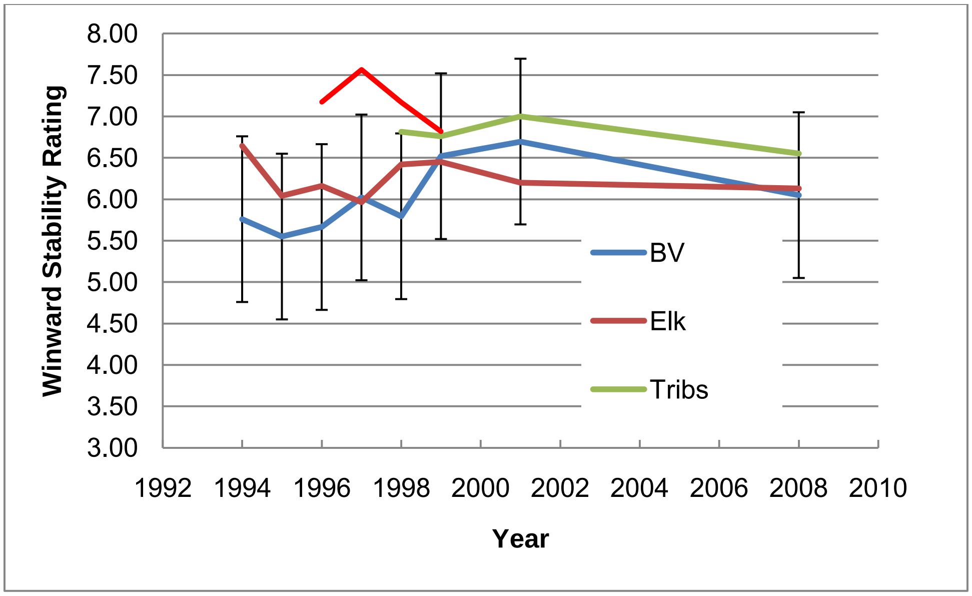

Figure 2.8 Trends in Winward Stability Ratings as compared with trends at reference sites for stations in Bear Valley Creek (BV), Elk Creek (ELK), and tributaries (Tribs). Confidence intervals are displayed for the Bear Valley (BV) data (Burton 2010).

Greenline Vegetation Ecological Status: Ecological status tends to average in the 75 to 95 range on Bear Valley and Elk Creeks. The lower half of this range, 75 to 85 is in the "Late" category and above that in the "Potential Natural Community" or PNC category. Reference sites and tributaries were consistently in the PNC category. These conditions reflect the predominance of late seral species on the greenlines in Bear Valley (Figure 2.9).

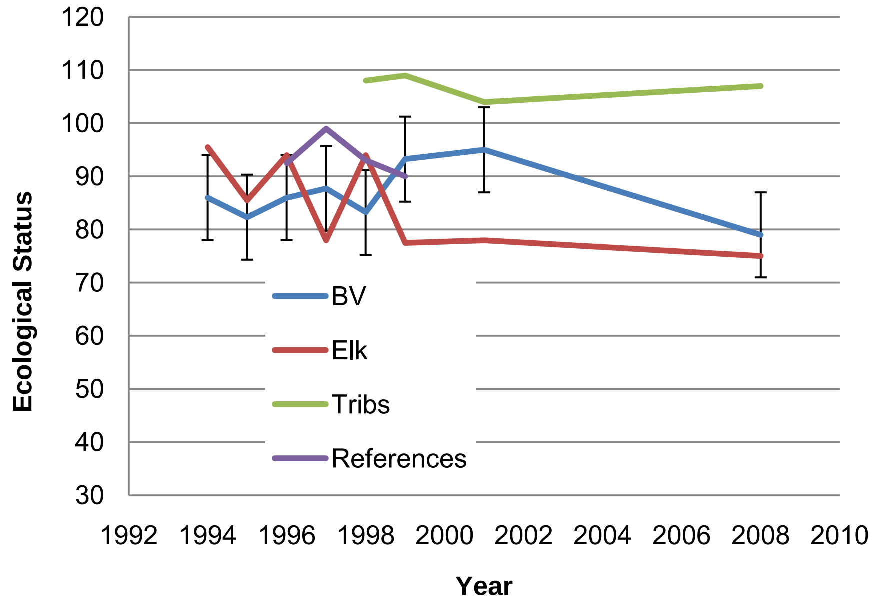

Figure 2.9 Ecological status trends at monitoring sites in Bear Valley Creek (BV), Elk Creek (Elk), and tributaries (Tribs) showing trends in comparison to trends at the reference sites (purple). Vertical error bars display confidence intervals on Bear Valley data (Burton 2010).

Substrate Fines: The analysis indicates that substrate fines were higher at the monitoring sites than at reference sites during the 1990s. By 2008, these conditions had reversed at many sites, where they were now comparable to or less than the average reference condition. In the early 1990s percent fines were in the 45 to 55 percent range on Bear Valley and Elk Creeks. By 2008 substrate fines were in the 20's. Reference site conditions in the 1990s were in the 15 to 25% range. The PACFISH Biological Opinion (USFWS 1998) suggested that for salmon spawning streams, the objective for substrate percent fines should be less than 20%, which should be used only as a comparison (Figure 2.10).

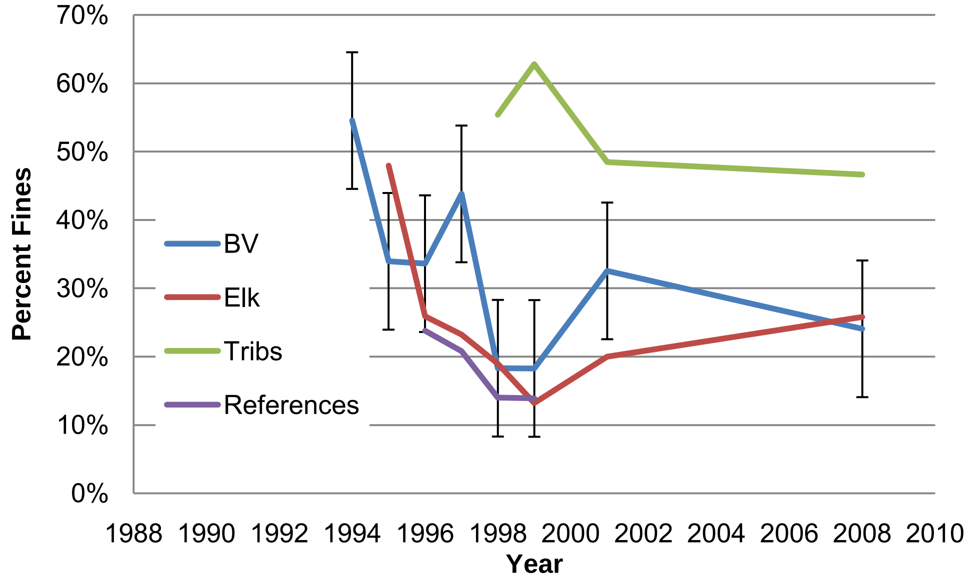

Figure 2.10 Substrate fine sediment trends at monitoring sites in Bear Valley Creek (BV), Elk Creek (Elk), and tributaries (Tribs) as compared to trends at the reference sites. Error bars indicate the confidence intervals of plus and minus 10% fines (Burton 2010).

Photographs 2.2 Transfer Cabin site on Bear Valley Creek, located about ½ mile upstream of BV7a**.** *This was a traditional point of cattle concentration where a major crossing of the channel was used while herding livestock. The photo at top was taken in 1986, the one in the center in 1999, and at bottom in 2008. The rail post fence was installed in the early 1990s to deflect cattle concentrations at this location, but the establishment of a riparian pasture here greatly improved riparian conditions at this point during the 1990s. There is evidence; however that hydric vegetation continued to encroach into the channel between 1999 and 2008.*

Photograph 2.3 Bear Valley Creek, Point bar near Site BV7b. *Top photo was taken in 2000, bottom photo in 2008. This bar is gradually being covered by perennial vegetation, evidence of vegetative encroachment in the Big Meadow on upper Bear Valley Creek.*

Sources of Pollutants causing Impairment

As discussed through analysis of the IDEQ BURP and USFS data, fine sediment in the BVW appears to be high. Additionally, fine sediment in the BVW appears to be higher than reference streams in the Upper Columbia River Basin. However, it is difficult to find an adequate number of reference sites that have similar geoclimatic settings (i.e.> 6,000 feet elevation, broad, flat valleys, and gentle, low gradient streams) as Bear Valley to make a true comparison of stream conditions (Eric Archer, PIBO group, personal communication, 2009). There is a shared estimation by the land managers familiar with the BVW, that the watershed may naturally carry a high sediment load because of the low gradients streams, meandering through glacial and lacustrine deposits. The low relief and broad valleys create an aquatic ecosystem where fine sediment is processed and transported more slowly than neighboring basins such as the Stanley basin and the Payette River basin.

This document also acknowledges that there are several anthropomorphic disturbances that have contributed to a high sediment load within the BVW. As discussed in ***Section 1***, excess sediment in Bear Valley Creek is primarily attributed to the historic dredge mining that took place in the 1950s and the failed reclamation attempt in the 1960s that resulted in large sediment inputs to the creek, most notably in a flood in 1984. An estimated 800 to 1,400 cubic yards of sediment per year was mobilized, transported, stored and is still being processed as a result of the mining activity. The historic dredge mining is believed to be the most significant source of sediment in the Bear Valley Creek portion of the BVW.

This is not the case, however, in the Elk Creek watershed where dredge mining did not take place. In the Elk Creek portion of the BVW, as well as other tributaries unaffected by mining, historic livestock grazing and existing roads have contributed sediment to streams. Historic livestock grazing contributed to unstable streambanks and diminished some riparian areas, resulting in streambank erosion and subsequent excess sediment delivery to the watershed. Livestock have not grazed in the Bear Valley watershed since 2001. Additionally, there are approximately 167 miles of roads within the BVW, some of which currently contribute sediment to streams. Since mining activities and livestock grazing have ceased within the BVW, existing problem roads are the dominant known anthropomorphic source of sediment still present in the BVW.

The following sections describe existing data on each of the sediment sources, past and current.

Sediment from Mining

Past mining is considered to be the largest source of sediment in the BVW, specifically in and downstream of AU 012_02a in Bear Valley Creek. The second order section of Upper Bear Valley Creek (headwaters to Sheep Trail Creek) AU 012_02a contains the section of Bear Valley Creek restored following the historic dredging operation (also referred to as the enhancement reach). The following information shows pre and post monitoring conditions for chinook salmon redds, macroinvertebrates, and percent fines. All parameters generally show an upward trend. While trends in fishery abundance are particularly hard to link to habitat improvement because factors outside the Bear Valley Watershed greatly influence the fish populations, it is clear that greater utilization of habitat in the restoration area is taking place (Figure 2.11).

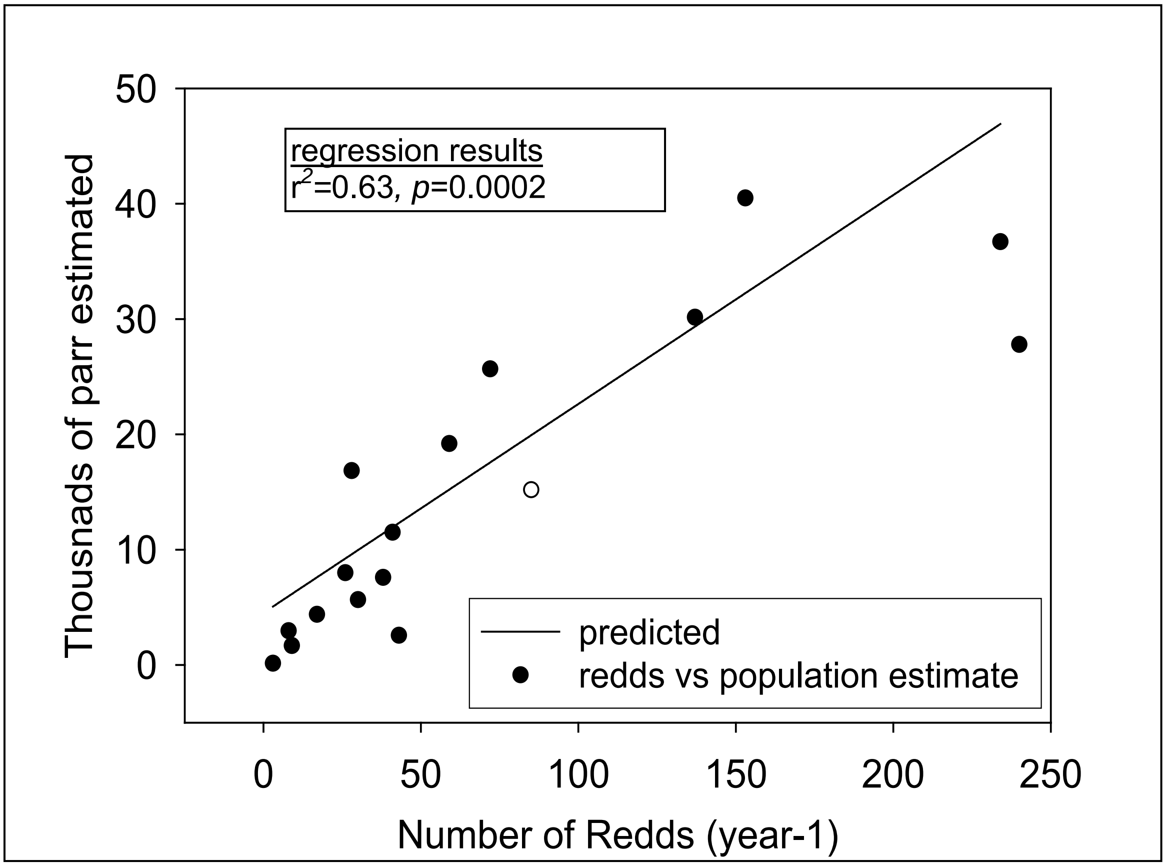

Figure 2.11 Relationship between the number of age 0+ Chinook salmon parr and the number of redds the previous year from 1989-2003 in Upper Bear Valley Creek AU ID17060205SL012_02a. (H.Ray, Shosone Bannock Tribes, personal communication 2005)

Macroinvertebrate sampling by the Shoshone-Bannock Tribes has shown that since rehabilitating the dredged area that the relative abundance of macroinvertebrate species intolerant to fine sediment has increased. A significant increase in the Order of macroinvertebrates: Emphemeroptera, Plecoptera, Trichoptera (EPT) species, a more favored food species for salmonids, has also occurred (Figure 2.12 and 2.13).

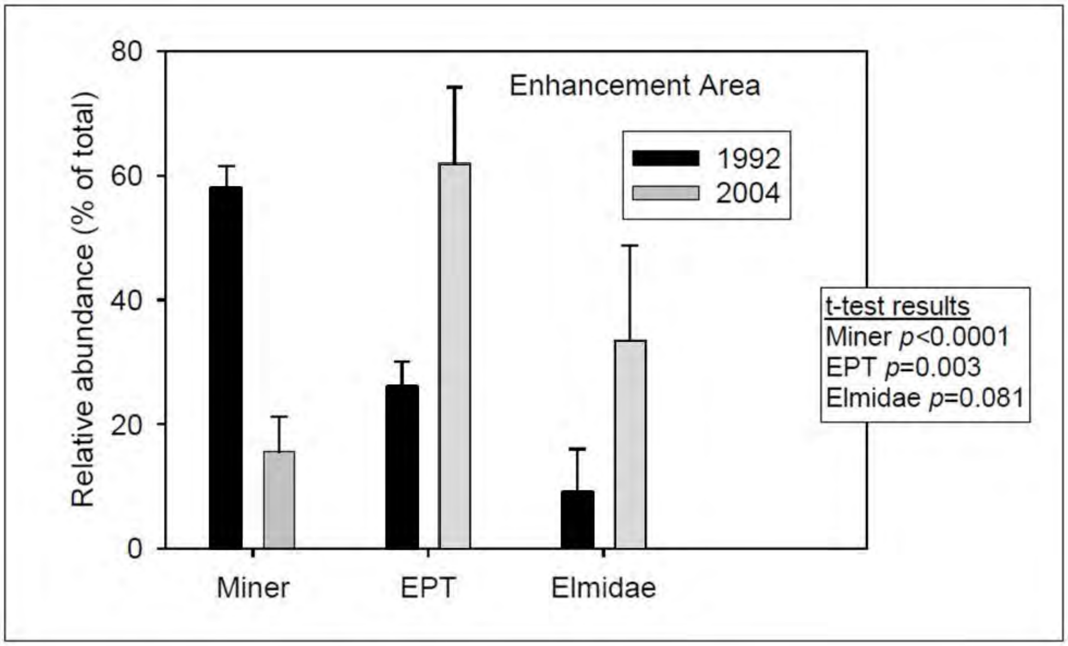

Figure 2.12 Relative abundance of macroinvertebrate groups within the enhancement area pre (1992) and post (2004) enhancement in Upper Bear Valley Creek (H.Ray, Shoshone-Bannock Tribes, personal communication 2005)

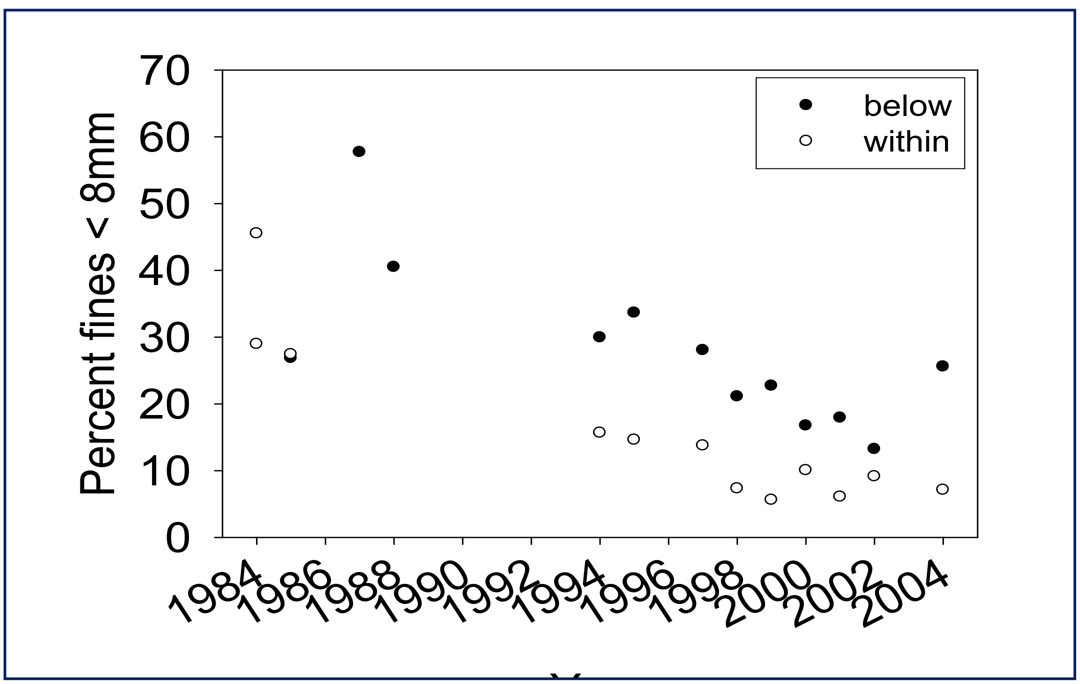

Figure 2.13 Average percent surface fine sediment < 8 mm below and within the enhancement area in Upper Bear Valley Creek between 1984 and 2004 (H. Ray, Shoshone-Bannock Tribes personal communication 2005).

Sediment from Roads

Existing problem roads are likely the largest current human-caused threat of sediment delivery in the BVW. In 2009, the EPA funded a site-specific road sediment inventory for the Bear Valley and Elk Creek watersheds. This inventory specifically quantified the extent and location of sediment contributions from roads to streams, using the Geomorphic Road Analysis and Inventory Package (GRAIP, Prasad et al. 2007, http://www.fs.fed.us/GRAIP). This suite of robust inventory and analysis tools evaluates the following road impacts and risks: road-stream hydrologic connectivity, fine sediment production and delivery, upstream sediment accumulation, drain point condition, stream crossing failure risk, gully initiation risk, and shallow landslide risk. A complete report, the Bear Valley Road Inventory (GRAIP) report (Fly et al. 2011), was prepared that details the GRAIP survey and model results, specific for the Bear Valley Watershed. A summary of the report's findings is included below.

GRAIP model results show a total of 146 miles of road were surveyed using the GRAIP methodology in 2009. Taken collectively, inventory results indicate that forest roads in the Bear Valley and Elk Creek watersheds do result in some hydrogeomorphic impacts and risks to water quality and the aquatic ecosystems. Relative to road sediment production, however, overall sediment delivery is low. Areas of high sediment delivery could be reconstructed or otherwise improved in order to substantially reduce road-to-stream sediment transport. GRAIP predictions can be used to address the needs of specific road segments and drain points in the design phase of future road restoration/maintenance projects.

Road-stream connectivity was calculated to be 18 miles (12.5%). The total amount of fine sediment from roads accumulating in Bear Valley Creek, Elk Creek, and their tributaries was 255 tons/year (Table 2.6), which accounts for 9% of all the sediment produced on Bear Valley roads. The predicted sediment delivery rate as a result of roads (1.3 tons/mi^2/yr, Table 2.6) suggests a 5% increase above the natural reference sediment erosion rate as predicted by the BOISED model (Fly et al. 2011).

Approxomately 10% of road drainage features were recorded to be in poor condition or in need of maintenance. The risk of stream crossings becoming plugged was evaluated based on a stream blocking index (SBI) where 1 indicates virtually no risk and 4 indicates high risk. The average SBI for stream crossings in this survey was 2. A total of 21% of all stream crossings have some potential to divert down the road prism if the pipe is blocked.

Table 2.6 GRAIP Stream sediment load values by subwatershed (HUC6).

Subwater-shed	**Accumulated Road Sediment** (GRAIP)		**Natural Reference Sediment Yield** (BOISED)		**Road Density (Rd mi/mi^2)**
	Total Sediment Yield* (Tons/yr)	**Rate per Unit Area* (Tons/mi^2/yr)**	**Total Sediment Yield* (Tons/yr)**	**Rate per Unit Area* (Tons/mi^2/yr)**	
Wyoming	4.0	0.2	540.6	21	0.5
Fir Creek	18.0	0.9	605.3	30	0.3
Cache	35.7	0.9	879.3	22	0.9
Upper Bear Valley	130.9	5.0	788.3	30	2.1
Upper Elk	1.2	0.0	979.4	24	0.1
Lower Elk	12.4	0.6	602.9	29	1.0
Bearskin	53.1	3.0	474.6	27	1.7
Combined Total	**255.3**	**1.3**	**4,870.4**	**25.5**	**0.9**

* The values in this table represent predicted model values and not absolutes.

Quantification of reference sediment production rates A quantitative model (BOISED) was used to calculate the natural reference sediment production rates. The model is used by the BNF to evaluate and compare the effects of certain land management scenarios on surface erosion and sediment production. The model is adapted specifically for forested watersheds in the Idaho Batholith (BNF 1991). BOISED is not intended to estimate absolute sediment quantities, but rather is a tool to quantify relative sediment production. Natural sediment production rates for undisturbed conditions are determined for each landtype delineated in a subwatershed. Landtypes found within Bear Valley are described in the Lowman Ranger District Soil-Hydrologic Reconnaissance Survey (Wendt et al, 1973). Total quantitative sediment production is calculated using coefficient and input variables contained within the model that are specific to each landtype.

Estimated background sediment production ranges between a minimum of 474 tons/year for Bearskin Creek subwatershed to a maximum of 979 tons/year for Upper Elk Creek subwatershed. Unit-area sediment production estimates range between a minimum of 21 tons/mi^2/yr in Wyoming Creek subwatershed, to a maximum of 30 tons/mi^2/yr for Fir and Upper Beaver Creek subwatersheds. Table 2.6 displays total and per-unit area estimates of reference sediment production rates by subwatershed.

Sediment delivery from roads in the BVW appears to be dispersed throughout the area (Table 2.6). Specific locations where clusters of drain points with high sediment delivery exist are few with varying characteristics. Initial analysis suggests that the data do not show patterns of consistently similar characteristics among separate areas of high sediment delivery. One observation made in reviewing GRAIP data is that stream delivery often occurred at or near live stream crossings. When a road bends around a draw where a stream is present and water drains on or near that bend, road sediment regularly reaches the stream, whether at the stream crossing or another drainage feature.

Drain points draining extended lengths of road, if connected to the stream, are likely to deliver a large quantity of sediment (Figure 2.7) displays the top 25 sediment-delivering drain points throughout the entire BVW. These 25 drain points deliver a total of 86.5 tons/year of sediment to streams, which equals 33% of the total amount of road sediment reaching streams. The average length of road draining to the top 25 sediment-delivering drain points was 490 feet compared to an overall average of 200 feet per drain point. All but one of these features were within 650 feet of a stream crossing or a stream running parallel to the road and 14 were within 175 feet. Shortening the length between drain points may reduce the amount of sediment produced within these 25 drain points.

There are some road segments that have relatively high levels of stream connectivity and sediment delivery. Road surface sediment delivery and the accumulated sediment delivered through drain points is shown for portions of forest roads 569, 563, 579, 582, and 502 in Figure 2.14 (Fly et al. 2011).

Table 2.7 below summarizes the amount of sediment from roads accumulated in the stream channels within the respective, not cumulative, Assessment Unit, as estimated through the GRAIP model.

Table 2.7 GRAIP Stream sediment load values by Assessment Unit.

Assessment Unit	Stream name	Accumulated Road Sediment Rate (GRAIP) ($tons/mi^2/yr$)
012_02a	Bear Valley Creek – 1st and 2nd order	4.9
012_05	Bear Valley Creek – 5th order	1.3
013_03	Bearskin Creek – 3rd order	3.0
013_04	Elk Creek – 4th order	0.8

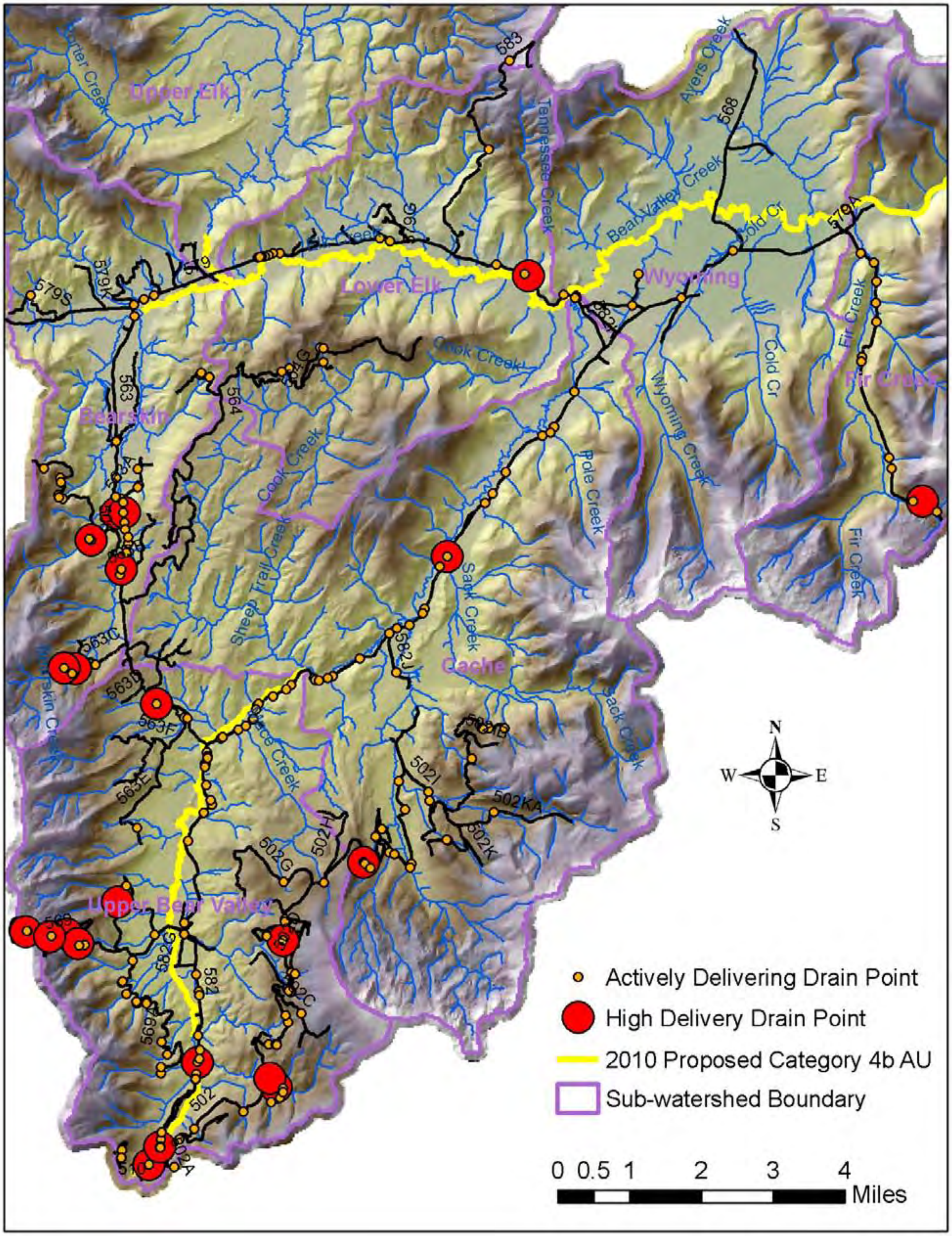

Figure 2.14 GRAIP Drain points actively delivering sediment (Fly et al 2011)

Sediment from Wildfire

Although not considered an anthropogenic source of sediment, wildfires have been prevalent within the BVW. In the last 25 years, a total of 59% of the BVW has burned in wildfires, 30% of that during the 2006 Red Mountain fire and the 2007 Sheep Trail fire. Approximately 49% of the recent fires burned with a moderate soil burn severity[4] and 4% burned with a high soil burn severity. Management actions to reduce runoff and subsequent surface erosion post-fire included rehabilitation of all hand firelines (no dozer lines or roads were constructed during 2006/7 fire suppression activities), spike camps and parking areas. Additionally, through the Burned Area Emergency Response (BAER) of 2006 Red Mountain Fire, approximately 1,500 acres received a helicopter straw mulching treatments to reduce surface erosion and sediment delivery to streams.

Surface erosion related to wildfires is assumed to be negligible after five years (BOISED, User's Guide, BNF 1991). Monitoring was conducted in the three years following the 2006 Red Mountain wildfire (2007-2009) on Wyoming Creek, Cold Creek, Cook Creek and Fir Creek (Green 2009). During the 2007 through 2009 field seasons, modified R1/R4 surveys and electrofishing surveys were completed on reaches of Wyoming Creek, Cold Creek and Cook Creek. A summary of the monitoring results related to sediment is described below.

Surface erosion from the burned areas occurred most recently in July 2008, during an intense thunderstorm in the BVW area. Surface runoff and some riling occurred, but no mass wasting or gullying was detected during observation flights over the burned area following the storm event (Grover-Wier, personal communication 2009).

Reconnaissance of the East Fork of Wyoming Creek in 2009 revealed a continued influx of large woody debris from the 2006 Red Mountain Fire, several large woody debris jams, no evidence of major channel changes due to wildfire, and some minor channel changes primarily due to log jams. Excellent bank stability and riparian vegetation since the 2006 fire, with an

[4] A moderate-soil burn severity fire is defined as one in which up to 40% of the area's soil surface litter and humus (effective ground cover) have been destroyed, and the A horizon has been subjected to intense heating. Severely scorched soils may become water repellent, leading to a reduced infiltration capacity that promotes overland flow, which can result in accelerated surface erosion. A high soil burn severity is where 40% of more of the areas soil surface litter and humus has been destroyed.

average 95% bank stability in 2009. Surface fines appear to have stayed the same in the East Fork of Wyoming Creek since the 2006 fire as measured by the fines grid (Table 2.9) (Green 2009). Wyoming Creek has had no major channel changes evident in monitoring reach, however just downstream of reach, there are some logjams and side channel changes. The riparian area is recovering well and there have been some new inputs of large woody debris from the 2006 fire. The surface fines have increased since the fire in 2006 in Wyoming Creek.

Wildfire intensity was high within the Cold Creek drainage. The two sites monitored responded differently over time in percent surface fine sediment; the upstream site went from 32% to 21% and was 28% in 2009. The downstream site increased its fine sediments from 80 to 90% with a peak of 95% in 2008, which is a significant increase since measurements were taken with a fines grid in 1999 (48%) and 55% in 2001.

Cook Creek data is inconsistent with the upstream monitoring site changing from 20.3% surface fines in 2007, to 8.7% in 2008 and up to 57% in 2009. The upstream site on Cook Creek is in a meandering “E” channel type meadow with high natural fine sediment (Table 2.8). The significant change in measured grid fines in 2009 may be due to different personnel monitoring that particular site in 2009 versus the other sites where the same person completed the monitoring in 2007-2009 (Grover Wier, personal communication 2010). The downstream site has much less sediment at 11-4% over the last 3 years (Green 2009).

Table 2.8 Percent Surface Fines in Four Streams affected by the Red Mountain Fire.

Location	1999	2001	2007	2008	2009
East Fork Wyoming Creek			25	25	24.5
Cold Creek (downstream)	48	55	80	95	90
Cold Creek (upstream)			32	21	28
Cook Creek (upstream)			20.3	8.7	57
Cook Creek (downstream)			11	5.2	4
Fir Creek (upper)		56		56	
Fir Creek (lower)		10		8	

2. Description of Pollution Controls and How they will Achieve Water Quality Standards

Excess sediment is described by narrative criteria (IDAPA 58.01.02.200.08): "Sediment shall not exceed quantities specified in Sections 250 and 252 or, in the absence of specific sediment criteria, quantities which impair designated beneficial uses. Determinations of impairment shall be based on water quality monitoring and surveillance and the information utilized as described in Subsection 350." Beneficial uses for streams in Bear Valley are described in Table 2.1.

Water Quality Goal

The water quality goal selected for this 4b justification focuses on sediment as the pollutant of concern. Since the state of Idaho has narrative sediment criteria, it is necessary to develop numeric goals for sediment for attainment beneficial uses (USEPA 2006). The BVW has a unique geoclimatic setting, including gentle hillslopes, low gradient streams, geology dominated by the granitic Idaho Batholith, and high elevation (6,000 feet) meadows. This geoclimatic setting has created broad valleys with low energy streams, meandering through glacial and lacustrine deposits. The low relief and broad valleys create an aquatic ecosystem where fine sediment is processed and transported more slowly than neighboring basins such as the Stanley basin and the Payette River basin. Because of this uniqueness, it is difficult to identify an adequate number of surveyed sites, in similar settings, in an undisturbed "reference" condition from which to discern in-channel water quality indicators (such as fine sediment and bank stability). Within the BVW itself, the majority of the watershed was grazed by livestock at some time in the last 30 years and was not considered appropriate for reference conditions.

Therefore, in place of an adequate in-channel indicator, sediment delivery from roads to streams (using the GRAIP model) was chosen as the indicator to measure achievement towards water quality goals for the BVW. Due to the progression of restoration activities (including stream improvement projects, the cessation of livestock grazing and mining, and a change in Forest Service management direction), roads appear to be the remaining stressor to the aquatic environment for which there is some level of anthropomorphic control (i.e. still improvement left to accomplish).

To develop the sediment indicator, the current sediment accumulation from roads to streams (using the GRAIP model) was compared to inherent reference sediment (using the BOISED model). It is possible and appropriate to use the two models for comparison as the inherent sediment rates from BOISED are incorporated into the GRAIP model. Current sediment accumulation from roads to streams was discussed in detail in ***Section 1*** of this justification and is presented, by AU, in Table 2.7.

Comparison of sediment accumulated from roads and natural reference sediment is described as a “percent over reference”. The “percent over reference” was calculated for the nine AUs that are currently meeting beneficial uses. The “percent over reference” was weighted by the area of the AU. The combined weighted average for the nine AUs meeting beneficial uses is 6% over reference. The range is 0 to 14%. This means, that on average weighted by the AU area, sediment accumulated from roads to streams is 6% greater than natural reference sediment for the nine AUs meeting beneficial uses. In comparison, for the four AUs not meeting beneficial uses, there is a 9% increase in sediment from roads to streams as compared to reference conditions. The range is 3 to 16%. Table 2.9 displays “percent over reference” for the nine AUs meeting beneficial uses.

A water quality goal of reaching a “percent over reference” accumulated road sediment within the range (0 to 14%) and near the average (6%) of the AUs supporting beneficial uses is determined appropriate for the BVW, based on the analysis displayed in Table 2.9 and agreement among the IDEQ, EPA and USFS.

Table 2.9 Percent Accumulated Road Sediment over Inherent Reference Sediment (tons/mi^2/yr) by Assessment Unit Meeting Beneficial Uses.

IDEQ AU	Stream name	Subwatershed(s) Draining to Assessment Unit	Accumulated Road Sediment *(GRAIP)* Total Sediment Yield (tons/yr)*	Accumulated Road Sediment *(GRAIP)* Rate per Unit Area (tons/mi^2/yr)*	Natural Reference Sediment Yield *(BOISED)* Total Sediment Yield (tons/yr)*	Natural Reference Sediment Yield *(BOISED)* Rate per Unit Area (tons/mi^2/yr)*	Percent Accumulated Road Sediment over Natural Reference Sediment Yield*
012_02	Lower Bear Valley Creek—1st and 2nd order	Cache, Wyoming, Fir Creek	9	0.2	971	24	**1%**
012_03	Bear Valley Creek—3rd order	Cache, Upper Bear Valley	136	3.8	1,003	28	**14%**
012_04	Bear Valley Creek—4th order	Cache, Upper Bear Valley	167	2.5	1,652	25	**10%**
013_02	Elk Creek—2nd order (includes Bearskin Creek and other tributaries)	Bearskin, Lower Elk	61	1.9	890	28	**7%**
014_02	Sheep Trail Creek	Cache	0	0.0	154	22	**0%**
015_02	Cub Creek	Upper Bear Valley	6	2.1	83	30	**7%**
016_02	Cache Creek—2nd order	Cache	6	0.6	222	22	**3%**
016_03	Cache Creek—3rd order	Cache	18	1.4	277	22	**6%**
017_02	Fir Creek	Fir Creek	18	1.6	335	30	**5%**
AVG.	**-**	**-**	**-**	**1.6**	**-**	**26**	**6%**

* The values in this table represent predicted model values and not absolutes.

Of the four AUs proposed for 4b, all but one AU (012_02a) are within the 0 to 14% range, though AU 013_03 is at 11%, over the 6% average, as displayed in Table 2.10.

There are two important caveats regarding the sediment goal of a range of 0 to 14% and average of 6% over natural reference sediment. First, the goal focuses solely on road-related sediment. It does not include other sediment sources within the watershed. Second, the goal is based on two predictive models (BOISED and GRAIP) that, while based on site-specific data, do not reflect absolute sediment production quantities. While keeping the two caveats in mind, the sediment goal does provide a useful tool for identifying current road-related sediment in comparison to natural reference values. As described in ***Section 5***, later in this document, the BURP survey will be the ultimate tool used to monitor the achievement of water quality standards.

Table 2.10 Percent Accumulated Road Sediment over Natural Reference Sediment (tons/mi^2/yr) by Assessment Unit included in 4b.

IDEQ AU	Stream name	Subwatershed Draining to Assessment Unit	Accumulated Road Sediment *(GRAIP)*		Natural Reference Sediment Yield *(BOISED)*		Percent Accumulated Road Sediment over Natural Reference Sediment Yield*
			Total Sediment Yield (tons/yr)*	Rate per Unit Area (tons/mi^2/yr)*	Total Sediment Yield (tons/yr)*	Rate per Unit Area (tons/mi^2/yr)*	
012_02a	Upper Bear Valley Creek–1st and 2nd order	Upper Bear Valley	131	4.9	807	30	16%
012_05	Bear Valley Creek –5th order	Fir Creek, Wyoming, Cache, Upper Bear Valley, Lower Elk, Upper Elk, Bearskin	255	1.3	4,763	25	5%
013_03	Bearskin Creek – 3rd order	Bearskin	53	3.0	483	27	11%
013_04	Elk Creek – 4th order	Lower Elk, Bearskin	67	0.8	2,295	29	3%
Average	-	-	-	**2.5**	-	**28**	**9%**

* The values in this table represent predicted model values and not absolutes.

Controls that will achieve Water Quality Standards

Controls already in place: The IDEQ and the BNF assert that the major anthropogenic causes of excess sediment delivery have been removed with the 1980s rehabilitation of the dredge mine site in Bear Valley Creek (Figure 1.10) and the 2001 cessation of livestock grazing (Figure 1.9) throughout the BVW. These actions alone will likely result in the attainment of water quality standards within several decades. There has also been a progression of stream improvement projects over the last 20 years (Table 2.11 and Appendix 1). Additionally, the BNF made a significant change in Forest Service management direction of the watershed (Table 1.3, Figures 1.2 and 1.3, Appendix 3, USDA 2003 Boise Forest Plan, pg. III-8 to III-77). These actions have generally resulted in steady water quality improvement within the listed AUs and even the full support of beneficial uses in most of AUs (Table 2.2) within BVW.

Table 2.11 General Summary of Pollution Controls Already in Place *(See Appendix 1 for detailed list).*

- Rehabilitation of Big Meadows dredge mine site
- Cessation of livestock grazing throughout the watershed
- Twenty years of stream habitat and riparian restoration projects
- Change in Forest Service management direction that emphasizes restoration and maintenance of aquatic, terrestrial and watershed resources.

- <u>Rehabilitation of Big Meadows dredge mine site:</u> In the 1950s, dredge mining for uranium and other rare earth elements near the headwaters of Bear Valley Creek left large amounts of unconsolidated overburden along 1.4 miles of the stream's floodplain. From the end of the 1950s until the late 1980s, this sediment was eroded and transported downstream in Bear Valley Creek. The resulting impairment of downstream aquatic habitat caused by excess recruitment of coarse and fine sediment was massive and long-lasting. Extensive rehabilitation of the mine site began was conducted from 1985 to 1989. The stream rehabilitation work did not contribute measurable sediment to Bear Valley Creek during the construction period (1985-1989). Rehabilitation work included grading and vegetating the high, erodible cut banks and creating a new floodplain along 1.5 miles of stream. Restoration of the mined reach of Bear Valley Creek has been successful. Macroinvertebrate sampling by the Shoshone-Bannock Tribes has shown that since rehabilitating the dredged area that the relative abundance of macroinvertebrate species intolerant to fine sediment has increased (Figure 2.5). A significant increase in EPT species, a more favored food species for salmonids, has also occurred. In the last 5 years, beaver have moved into the restoration reach (Grover Wier personal communication, 2010), re-charging the floodplain and improving riparian health. This reach is expected to continue an improving trend of stream health.

- Cessation of Livestock Grazing, watershed-wide: Livestock grazing (cattle and some sheep) occurred in the BVW starting in the early 1900s and continuing until 2001. Although there is little definitive information on early livestock grazing in the BVW, the large numbers of cattle and sheep that initially grazed there certainly resulted in a changes of plant cover, loss of effective soil ground cover, and damage to the riparian habitat. This downward trend likely continued through the 1970s, even though efforts were made to reverse the trend through range fence/pasture management changes. Through the 1980s, there was a 27% reduction in the actual use; this plus management efforts to reduce effects on riparian areas, appears to have slowed the downward trend at the time. From 1990 through 1998, there was an additional 42% reduction in actual use (USDA 2010, Bear Valley Watershed Analysis). This reduction, along with implementation of the riparian pastures and construction of riparian enclosures, brought an improving trend. Many of these changes were due to the ESA-listing of the spring chinook salmon and the subsequent change in management. By the 2001, livestock grazing was completely ceased in the watershed. The BPA funded the purchase of all grazing privileges (through issued permits) in order to protect the listed salmon.

  Since the cessation of livestock grazing in 2001, visual changes in riparian condition are evident (Photographs 2.2 and 2.3). Riparian monitoring to assess the impacts due to livestock grazing was conducted in the BVW from 1994 through 2001. A survey of a subset of the monitoring sites was conducted in 2008 to assess the changes in riparian condition since livestock grazing was removed (Burton 2010). The indicators analyzed with the 2008 data include bank stability, fine sediment, ecological status, and Winward stability rating. Of interest in the monitoring results are the trends in substrate indicators (percent fine sediment) prior to 2000. A least-squares fit to the averages for the monitoring sites prior to the year 2000 compared to all years shows a much steeper decline in the earlier time period (1994-2000). The substrate data suggest that much of the improvement to Bear Valley streams occurred during the years of intensive livestock management (mid to late 1990s) following the ESA-listing of the chinook salmon. By the end of the decade, when all grazing ceased, little improvement has occurred. The same cannot be suggested for the other riparian indicators. Bank stability, for example, generally declined during the 1990s and then recovered slightly during the 2000s. Ecological status remained essentially static through the years. Winward stability rating increased over all years, but the 1990s did not see as steep a compared to the 2000s. One hypothesis is that the changes in riparian conditions were more pronounced between the pre-1990s -less -restrictive grazing and the mid-1990s- more-managed grazing than changes between more- managed grazing and no grazing. Following that hypothesis, the changes in riparian condition may be slow to significantly display since the cessation of livestock grazing in the high elevation meadows of in the BVW (Burton 2010).

- Stream Habitat Improvement and Riparian Restoration Projects: The BVW has a long history of water quality improvement projects (see Appendix 1) from various government agencies, tribal entities and private interests. As seen in Appendix 1, projects were primarily initiated in the late 1980s, throughout the 1990s as well as in 2004-2005 to address both streambank stability and riparian degradation. Often unstable areas and degraded riparian systems are found in the same place. Areas of instability and/or degraded riparian areas were identified by the US Forest Service and water quality improvement projects implemented to improve stability, increase riparian cover and thus ultimately improve fish habitat and support attainment of beneficial uses. Improving bank stability not only keeps excess sediment out of the stream, resulting in lower excess fines, but also keeps the channel from widening unnaturally and allows reestablishment of vegetation either through planting or natural colonization processes.

  In 2001, a review of the projects in the 1990s was conducted (USFS 2001). The report concluded was that projects involving structural measures such as barbs or revetments, were often causing more damage than they were benefitting. A move toward more passive restoration (i.e. riparian planting) was made after this report came out. IDEQ concludes, based on the upward trend in sediment parameter data and the best professional judgment of USFS hydrologists that this passive approach is effective and will result in attainment of water quality standards.

  The BVW Analysis (USFS 2000, updated USFS 2010) was conducted because of the need of an ecosystem assessment to help guide federal land managers in their watershed decision making as it pertains to the presence of wild steelhead, chinook salmon and resident bull trout. This watershed is key to the conservation of resident fish species and anadromous stocks. Although not currently a designated beneficial use, salmonid spawning is the most sensitive use and thus, decisions made to protect and enhance the salmonid fishery will also likely lead to the achievement of water quality standards. Recommendations for stream habitat improvement and riparian restoration from the Bear Valley Watershed Analysis are listed in Appendix 2. Several of the recommendations have been implemented and additional projects are listed as "planned" on the table of improvement projects included in Appendix 1.

Change in Forest Service Management Direction: As described in Section 1 of this document, the 2003 Boise Forest Plan established new management direction for the Bear Valley Watershed. Appendix 3 shows the management directives outlined in the 2003 Boise Forest Plan as it relates to protecting the watershed's water quality and aquatic resources. These directives show the management guidelines for Forest Service activities to ensure that road, recreation and vegetation management activities do not adversely affect fisheries as well as the Forest Service's directive to attain water quality standards. The Boise National Forest's 2003 Forest Plan removed the Bear Valley Watershed area from the suited timber basis and made the restoration and maintenance of aquatic, terrestrial and hydrologic resources the focus (Figure 1.3).

***Controls Scheduled for Implementation*:** Because the majority of the anthropomorphic causes of sediment have been eliminated or managed, the IDEQ and the Forest Service contend there is little additional work to be implemented that will significantly increase water quality in the four AUs proposed for Category 4b. Instead, passive restoration (including maintaining existing improving riparian conditions) and continued monitoring will sustain the trend toward achieving water quality goals. As described earlier, the BVW's gentle relief, broad valleys and low gradient, meandering streams create an aquatic environment where fine sediment is processed and transported more slowly than neighboring basins such as the Stanley basin and the Payette River basin. Part of the passive approach to restoration in this area is allowing adequate time for sediment to be processed and transported in and through the system. Included in the little additional work to be implemented are planned road improvements and stream restoration, both described below.

Reduction of Road-related Sediment : Although the GRAIP survey described sediment from roads to streams as low (Fly et al 2011), this sediment source does exist and the GRAIP survey results suggest that road improvements would certainly result in direct reduction of sediment delivery to streams. For the four AUs included in this 4b, roads add 3% to 16% over natural sediment (Table 2.12) to streams.

National Forest System (NFS) road 569 has the single highest sediment-delivering drain point and several other high delivery drain points within its length. NFS roads 502, 582, 563, and 579 have frequent drain points which are actively delivering fine sediment to streams. Road-stream connection often occurs at or near live stream crossings on roads. Although these predicted locations of high sediment delivery are based on thorough field observations and careful data processing, additional and detailed field surveys of the indicated road segments and drain points would need to be completed in order to prescribe effective restorative management plans. Reconstruction of such sites is possible and feasible in most cases. In order to decrease sediment delivery, road improvements may involve the addition of more frequent road drainage features, leaving a shorter distance between features. This would decrease the energy of concentrated flow to individual drain points, thus shortening the distance that water and sediment travels down the hillslope. Treatments may also include re-surfacing the road with a crushed rock aggregate or another type of surface which is less erosive (Fly et al. 2011).

Project work planned by the BNF in 2011 will eliminate a portion of the sediment from roads to streams. Approximately 3 miles of road (distributed among many road segments) are proposed for road improvements, including all the high delivery drain points identified on Figure 2.14. Specific road treatments will be determined by the BNF in summer of 2010 through pre-implementation planning. Approximately $125,000 of funds have been secured through the Forest Service for road improvements in Bear Valley[5]. Table 2.12 below displays the sediment reduction expected to be realized once road improvements are implemented, as predicted by the GRAIP model. Specifically, in the four AUs listed in this 4b, road improvements proposed in the next five years are predicted to reduce accumulated sediment to a range of 2% to 10%. Reductions as a result of erosion mitigation factors as described in BOISED (USFS 1991) and assume a moderate level of erosion mitigation (40% reduction) from road improvements such as installing additional cross-drains, installing additional ditch relief culverts, adding road surfacing materials, and/or providing a (vegetative or rocked) filter at the outlet of drainpoints.

Under a 40% reduction scenario, all of the four 4b AUs are estimated to meet the sediment goal of reaching the “percent over reference” range of the fully supporting AUs. It is the intent of the Forest Service to implement all practical road improvement measures within the next five years. Monitoring would take place within the 10 year monitoring term (see ***Section 3*** below) to determine if the implemented road improvements are maintaining an improving trend and moving towards achievement of water quality standards. However, restoration of full beneficial uses and achievement of water quality standards may still take decades in this particular AU. The AU (012_2a) includes the portion of Bear Valley Creek directly downstream of the Big Meadows mine site. Although this AU is on a

[5] These are USFS Legacy Roads funds budgeted for 2011 and include the replacement of the Tennessee Creek culvert for fish and debris passage.

restoring trend, the legacy of high sediment loads and the channel impacts are slow to completely recover. Monitoring this particular AU, using both BURP and PIBO surveys, is planned and monitoring results will help better define the trend toward achieving water quality standards.

In addition, road improvements are planned on roads within AUs currently meeting beneficial uses in 2011 and improvements in the 4b AUs will also reduce (downstream) accumulated sediment in the AUs meeting beneficial uses. Sediment reduction through road improvements within the AUs currently meeting beneficial uses, will contribute to meeting water quality standards in the watershed as a whole. Table 2.13 displays the resulting “percent over reference” for the nine AUs currently meeting beneficial uses.

Table 2.12 Predicted Change in Percent Accumulated Road Sediment over Natural Reference Sediment as a result of Road Improvement Actions for the 4b Assessment Units.

IDEQ Assessment Unit	Stream name	Subwatershed(s) Draining to Assessment Unit	Total Accumulated Road Sediment Yield (tons/yr)*		Percent Accumulated Road Sediment over Natural Reference Sediment Yield*		Predicted Reduction (%) of Total Accumulated Road Sediment Yield after Road Improvements
			Before	After	Before	After	
012_02a	Upper Bear Valley Creek–1st and 2nd order	Upper Bear Valley	131	79	16%	10%	40%
012_05	Bear Valley Creek –5th order	Fir Creek, Wyoming, Cache, Upper Bear Valley, Lower Elk, Upper Elk, Bearskin	255	153	5%	3%	40%
013_03	Bearskin Creek – 3rd order	Bearskin	53	32	11%	7%	40%
013_04	Elk Creek – 4th order	Lower Elk, Bearskin	67	40	3%	2%	40%

* The values in this table represent predicted model values and not absolutes.

Table 2.13 Predicted Change in Percent Accumulated Road Sediment over Natural Reference Sediment as a result of Road Improvement Actions for the Assessment Units Meeting Beneficial Uses.

IDEQ Assessment Unit	Stream name	Subwatershed(s) Draining to Assessment Unit	Total Accumulated Road Sediment Yield (tons/yr)*		Percent Accumulated Road Sediment over Natural Reference Sediment Yield*		Predicted Reduction (%) of Total Accumulated Road Sediment Yield after Road Improvements*
			Before	After	Before	After	
012_02	Lower Bear Valley Creek—1st and 2nd order	Cache, Wyoming, Fir Creek	9	5	1%	1%	0%
012_03	Bear Valley Creek—3rd order	Cache, Upper Bear Valley	136	80	14%	8%	41%
012_04	Bear Valley Creek—4th order	Cache, Upper Bear Valley	167	102	10%	6%	39%
013_02	Elk Creek—2nd order (includes Bearskin Creek and tributaries)	Bearskin, Lower Elk	61	37	7%	5%	32%
014_02	Sheep Trail Creek	Cache	0	0	0%	0%	N/A
015_02	Cub Creek	Upper Bear Valley	6	3	7%	7%	0%
016_02	Cache Creek—2nd order	Cache	6	4	3%	3%	0%
016_03	Cache Creek—3rd order	Cache	18	11	6%	6%	0%
017_02	Fir Creek	Fir Creek	18	8	5%	2%	54%

Casner Creek Stream Restoration: In 2010, the Forest Service, the IDEQ, the Southwest Idaho Resource Advisory Committee (RAC) and Trout Unlimited initiated a partnership with the Casner Creek Restoration project. This project started restoration activities on a 0.5 mile reach of Casner Creek, which was converted into a ditch during the dredge mining activities in the 1950s in the Big Meadows Area. Implementation of the restoration activities removed a berm along the west streambank, which restricted overbank flows during spring runoff, and installed ten biolog structures. The project is intended to set in motion natural meander formation and in the long-term reduce sediment inputs from Casner Creek to Bear Valley Creek, improving water quality in the Bear Valley Creek – 2nd order AU.

The IDEQ's BURP surveys are the identified tool to determine if water quality standards have been met through the implementation of pollution controls listed above. The Monitoring section (***Section 5***) of this 4b describes the planned BURP surveys in more detail.

Description of requirements under which pollution controls will be implemented

The Forest Service believes that the pollution controls proposed above will maintain an improving trend in water quality and aquatic habitat in the four AUs proposed for Category 4b. Clearly, the Forest Service and its partners have taken an active role in restoring full beneficial use support to most of the AUs within the BVW (Table 2.3) and are already on track for this to occur in the remaining four AUs.

Millions of dollars have been spent on water quality improvement projects in the BVW since the 1980s. As shown in Appendix 1, projects have been ongoing in the watershed for three decades. In addition, there are new projects planned (Appendix 1). Federal funding for the watershed is determined on a year to year basis, as approved by the U.S. Congress. However, the BNF's emphasis on water quality and aquatic habitat, restoration, combined with the importance of this area as a stronghold for anadromous fish and bull trout, make the BVW a high priority for restoration funds. In recent years (2008, 2009), the BNF identified special monies for the maintenance of roads within the 2006 and 2007 burned areas. In 2010, the Forest Service, the IDEQ, the Southwest Idaho RAC and Trout Unlimited partnered in the Casner Creek Restoration project. In 2011, two additional PIBO survey sites will be established to monitor trends in water quality and aquatic habitat conditions. Also in 2011, the Forest Service has allocated funds to repair road problems identified through the 2009 GRAIP survey. The Forest Service will continue to request funding on an annual basis, as needed, for projects in Bear Valley Watershed.

3. Estimated or Projected Time When Water Quality Standards will be Met

It is the stated intent of the Forest Service to take all the practical management actions possible to move the BVW towards meeting water quality standards in 10 years. Sediment reduction from roads to streams should be realized within one field season of implementing road improvements. However, it may take up to 20 years for the sediment reduction from roads to streams to display as a reduction of instream fine sediment as monitored through BURP surveys. The USFS and the IDEQ believe that ten years is a reasonable timeframe to identify trends of improvement and evaluate instream sediment in relation to the water quality goal as described in Table 2.12.

If improvement is static or actually shows a decline, this should initiate an investigation into whether or not declines are due to factors that are not within the realm of natural variability and whether or not a natural event (i.e. wildfire) has contributed to that decline. Subsequent implementation of water quality improvement projects may follow.

Large streamflow events could accelerate the attainment of water quality standards by increasing the rate of transport of fines that are already in the system out of the affected reach although a relationship between the magnitude of flow and amount of sediment that would be transported is unknown.

Updates of monitoring and implementation activities, as well as an assessment of moving towards

4. Schedule for Implementing Pollution Controls

The most effective pollution control measures are already in place in the BVW (cessation of grazing and mine rehabilitation). In the 10-year monitoring period the following pollution controls are planned for implementation (Table 2.14):

Table 2.14 Schedule for Implementing Pollution Controls, 2010-2020.

Pollution Control	Existing Control	Implementation of new Control (Year)
Cessation of livestock grazing	Will continue.	
Boise Forest Plan, Restoration Management Direction	Will continue	
Casner Creek Stream Restoration		2010
Road Improvements (GRAIP-identified)		2011-2016

5. Monitoring Plan to Track Effectiveness of Pollution Controls

Stream habitat monitoring and the use of multidimensional indices, will be applied to monitor trends in fine sediment in the four AUs proposed for Category 4b. There are two specific monitoring protocols that will be utilized to track the effectiveness of pollution controls; the BURP survey and the PIBO survey. The IDEQ BURP monitoring will be the ultimate tool used to determine if water quality standards are achieved. However, the PIBO data may be used to help determine support of beneficial uses in the future. These data have been collected in the BVW (Section 1 of this document) and will continue to be collected. Both data sets utilize a combined index or condition score. Monitoring efforts will focus on providing the feedback loop necessary to ensure that water quality improvement continues in the BVW.

BURP Indices: The BURP index will be used to determine support of beneficial uses. The BURP Index incorporates three metrics: stream macroinvertebrate index, stream fish index, and a stream habitat index (Grafe et al. 2002). The indices are classified using data collected during standardized sampling in accordance with BURP protocol (IDEQ 2007). Collection of the BURP data will depend on IDEQ funding, but is proposed for at least two times in the 10-year monitoring timeframe.

PIBO Condition Score: The PIBO stream condition score also incorporates three metrics: a habitat condition index, a temperature index and a macroinvertebrate index (Table 2.15). The PIBO condition score differs notably from the BURP index in that it incorporates covariates to reduce natural variability among different geoclimatic settings.

<u>Habitat Score:</u> The habitat condition index (Al-Chokhachy et al 2010) incorporates undercut streambanks, bank angle, substrate size, fine sediment, large woody debris volume and frequency, residual pool depth and pool frequency. Habitat scores range from 1 to 100, with 100 being closer to reference conditions, using following regression models:

Table 2.15 Parameter estimates, model structure, and model fit from reference-reach multiple regression models used to score individual metrics for each dependent variable in the index (Al-Chokhachy et al 2010).

Attribute	Regression model	Adj. R^2
Percent undercut(%)[b]	0.98 - 0.06*(grad) - 0.15 (precip) – 0.002*(area) + 0.08*(ign) - 0.18*(sed)	0.35
Bank angle (°)	58.1 + 6.7*(grad) + 14.8*(precip) + 0.29*(area) + 0.2*(segment slope) -8.9*(ign) + 11.7*(sed)	0.39
d_{50}[c]	-5.5 + 0.63*(grad) + 0.65*(precip) + 0.02*(area) – 0.43*(drainage den) - 0.32*(ign) + 0.0003*(elev)	0.56
Percent fine sediment (<6mm)[b]	0.76 – 0.004*(area) – 0.11*(grad) – 0.19*(precip) + 0.12*(drainage den) + 0.09*(ign)	0.36
LWD volume (m^3/km)[c]	5.1 + 0.02(% segment forested) – 0.02*(segment slope) – 0.001*(elev)	0.17
LWD frequency (pieces/km)[c]	4.1 + 0.02*(% segment forested) – 0.02*(segment slope) + 0.48*(drainage den)	0.14
Residual pool depth (m)[c]	-1.1 – 0.24*(grad) + 0.004*(area) + 0.25*(precip)	0.33
Percent pool (%)[b]	1.6 – 0.2*(grad) – 0.003*(area) – 0.0001*(elev) – 0.20*(precip)	0.44

[a]Area is catchment area,(km^2), precip is average annual precipitation (m), drainage den is the density of streams within the catchment (km/km^2), ign is a categorical variable denoting the dominant geology is or is not igneous, grad is reach gradient (%), elev is the elevation of the bottom of the reach (m), % segment forested is the percent of the riparian buffer (%; 90 m on each side of stream) that is forested 1 km upstream from the bottom of reach, and sed is a categorical variable denoting the dominant geology is or is not sedimentary.
[b]Transformed using arcsine square root.
[c]Log (natural) transformed

Temperature Score: Stream temperature is analyzed using a stream temperature model (Reiman et al. 2007) developed by the Forest Service Rocky Mountain Research Station.

Macroinvertebrate Score: Macroinvertebrate populations are scored based on taxonomic completeness or the proportion of expected taxa that were observed, referred to as *O/E* (observed/expected). Using this method (Hawkins 2006), the closer the *O/E* is to 1, the higher the biological integrity of that stream reach.

The PIBO data will continue to be collected annually at the Bearskin Creek sentinel site. Additional sites will be added in 2010 and 2011 to increase the dataset and the ability to utilize the PIBO habitat condition score to monitor trends in stream habitat. The additional sites will be co-located with the existing

BURP sites whenever possible, and will be tied to the 4 AUs proposed for Category 4b.

Other Monitoring Efforts: Additional monitoring will continue in the BVW. Chinook salmon redd monitoring occurs annually, through a cooperative effort between the IDFG and the Forest Service. The Shoshone-Bannock Tribes also conduct annual redd monitoring. The Forest Service conducts focused monitoring related to specific projects (such as culvert replacement and stream restoration projects) which provide a good method of quickly catching perturbations related to human actions. The periodic monitoring takes into account the need to revisit implementation project areas to determine efficacy and make changes as necessary. This monitoring will allow resource managers to investigate any static or declining trends in habitat metrics to determine if additional remedial actions need to be taken. The Forest Service continues to deploy temperature loggers in the watershed on a semi-annual basis. The Forest Service will also monitor a subset of the Bear Valley riparian monitoring sites within the ten years.

6. Commitment to Revise Pollution Controls as Necessary

If monitoring indicates a downward trend in stream health, the Forest Service will determine whether additional controls are necessary and provide a plan for implementing these controls. Currently, the BVW is showing an upward trend with the pollution controls that are currently in place.

The US Forest Service has already demonstrated their commitment to revising pollution controls as necessary by analyzing the effectiveness of their stream stabilization techniques in 2001. As a result of this study, the Forest Service changed their habitat improvement approach towards more passive restoration methods. The Forest Service recognizes the importance of allowing streams in the BVW time for natural restoration and processing existing high sediment loads. When there is excess sediment in a stream type like Bear Valley Creek, the stream can increase in sinuosity and belt width. If structural restoration activities, such as barbs or revetments are applied too early in this process, the result can be accelerated erosion due to restriction of natural stream channel processes, particularly in a meadow ecosystem.

The IDEQ and USFS will commit to revisiting the pollution controls, as necessary, if progress toward meeting water quality standards is not achieved within 10 years. If BURP indices do not show a trend moving toward water quality goals within 10 years and if there is an increase in percent fines over the target levels, IDEQ may choose to develop a TMDL.

Table 2.16 below displays the proposed monitoring and assessment activities within the next 10 years based on the following anticipated commitments from the IDEQ, USFS and EPA:

- BURP survey: every 5 years (starting in 2008).
- PIBO survey: sentinel (Bearskin) site, every 2 years, other sites every 5 years.
- GRAIP survey: redo in 2019 (10 years following the 2009 survey)
- Bear Valley Riparian Monitoring: 4 sites every 3 years.
- 4b Plan: update every 2 years, based on any changed conditions or monitoring completed.
- Chinnook redd surveys: These surveys occur annually as a cooperative effort between the Idaho Department of Fish and Game and the USFS.

It is the intent of the IDEQ and the USFS to strive to complete the monitoring listed below. However, monitoring will depend on future funding not yet secured.

Table 2.16 Proposed IDEQ, USFS, EPA Monitoring and Assessment Schedule

Year	Planned Monitoring	Other Planned Activities	Assessment
2011	2 new PIBO sites, PIBO sentinel site Chinook redd surveys,	Complete 4b Plan, Complete Road Improvement prescriptions, Monitor Casner Creek Restoration Project Begin Road Improvement project Complete Tennessee Creek culvert replacement	
2012	PIBO sentinel site, Chinook redd surveys, BV Riparian monitoring (4 sites), Chinook redd surveys		
2013	BURP survey, PIBO survey, Chinook red surveys	4b plan update	Implementation progress, Assess Water quality trends
2014	PIBO sentinel site, Chinook redd surveys,		
2015	PIBO survey, Chinook redd surveys	4b plan update	Implementation progress, Assess Water quality trends
2016	PIBO sentinel site, Chinook redd surveys, BV Riparian monitoring (4 sites)		
2017	Chinook redd surveys,	4b plan update	Implementation progress, Assess water quality trends
2018	PIBO sentinel site, Chinook redd surveys, BURP survey		
2019	Chinook redd surveys, GRAIP survey, BV Riparian monitoring (4 sites)	4b plan update	Implementation progress, Assess water quality standards
2020	PIBO Sentinel site, PIBO survey, Chinook redd surveys		GRAIP Report

References Cited

Al Chokhachy,.R., B.R. Roper and E.K. Archer. 2010. Evaluating the status and trends of physical stream habitat in headwater streams within the interior Columbia River and upper Missouri river basins using an index approach. Pending publication in the Transactions of the American Fisheries Society.

Batt, P.E. 1996. Governor Philip E. Batt's Idaho bull trout conservation plan. State of Idaho, Office of the Governor. Boise, ID. 20 p + appendices.

BLM Mining Claim Records, 2009. http://www.blm.gov/lr2000

Burton, T. 2010. Results of Monitoring Stream Channels and Streamside Vegetaion, 1994 to 2008. Bear Valley Basin – Headwaters of the Middle Fork Salmon River Unpublishrd report for the Boise National Forest.

Clean Water Act (Federal water pollution control act), 33 U.S.C. § 1251-1387. 1972.

Fly, C. K. Grover Wier, J. Thornton, and T. Black. 2011. Bear Valley Road Inventory (GRAIP) Report. Bear Valley Category 4b Assessment. Lowman Ranger District, Boise National Forest. Lowman, ID. 44p. *revised 2/2011.*

Grafe, C.S., C.A. Mebane, M.J. McIntyre, D.A. Essig, D.H. Brandt, and D.T. Mosier. 2002. The Idaho Department of Environmental Quality water body assessment guidance, second edition-final. Department of Environmental Quality. Boise, ID. 114 p.

Green, D. 2009. Red Mountain and Sheep Trail Fires BAER Monitoring Report. Lowman Ranger District, Boise National Forest. December 2009. 17 pages.

Hawkins, Charles P. 2006. Quantifying Biological Integrity by Taxonomic Completeness: Its Utility in Regional and Global Assessments. Ecological Applications, 16 (4). 2006. pp. 1277-1294.

Heitke, Jeremiah D.; Archer, Erik J.: Dugaw, Dax D.: Bouwes, Boyd A.; Archer Eric A.; Henderson, Richard C.; Kershner, Jeffrey L. 2008. Effectiveness monitoring for streams and riparian areas: sampling protocol for stream channel attributes. Unpublished paper.

Idaho Code § 39.3611. Development and implementation of total maximum daily load or equivalent processes.

Idaho Code § 39.3615. Creation of watershed advisory groups.

IDAPA 58.01.02. Idaho water quality standards and wastewater treatment requirements.

IDEQ. 2007. Beneficial Use Reconnaissance Program Field Manual for Streams. BURP Technical Advisory Committee. IDEQ Boise, 186 pp

IDEQ 2008 Middle Fork Salmon River Subbasin Assessment and TMDL. Department of Environmental Quality. Boise, ID 227 p

IDEQ. 2010 IDASA database. Internal IDEQ database.

IDEQ. 2010 Department of Environmental Quality Working Principles and Policies for the 2010 Integrated (303[d]/305[b]) Report, DRAFT

IDFG, USFS, and Shoshone-Bannock Tribes. 2009 Preliminary Redd Count Summary for Bear Valley Creek and Middle Fork Salmon River. Queried from the Spawning Ground Survey database 12/21/2009.

Kershner, J.L., E.K. Archer, M. Coles-Ritchie, E.R. Cowley, R.C. Henderson, K Kratz, C.M. Quimby, D.L. Turner, L.C. Ulmer, and M.R. Vinson. 2004b. Guide to effective monitoring of aquatic and riparian resources. General Technical Report RMRS-GTR-121. Fort Collins, Colorado.

Mebane,C.A. 2000. Stream Fish Index. In Grafe, C.S. (editor) Idaho stream ecological assessment framework: an integrated approach. IDEQ, Boise, ID 57 pp.

Overton, C. K.; McIntryre, J.D., Armstrong, R.D., Whitwell, S.L., Duncan, K.A. 1995. User's Guide to fish habitat:Descriptions that represent natural conditions in the Salmon River Basin, Idaho. GTR INT-GTR-322. Ogden, UT: USDA, Forest Service, Intermountain Research Station. 142 p.

PIBO. 2009. Unpublished data from the Pacfish/Infish Biological Opinion Monitoring Effectiveness. http://www.fs.fed.us/biology/fishecology/new.html#pibo_reports

Prasad, Ajay. 2007. A tool to analyze environmental impacts of road on forest watersheds. MS Thesis. Utah State University, USA

Rieman, B.R., Isaak, D., Adams, S., Horan, D., Nagel, D., Luce, C., and Myers, D. 2007. Anticiapted Climate Warming Effects on Bull Trout Habitats and Populations Across the Interior Columbia River Basin. Transactions of the American Fisheries Society 136:1552-1565,

Rosgen, D.L. 1985. A stream classification system. In: Johnson, R.R.;Ziebell, C.D.; Palton, D.R.;Folliott, P.F.; Hamre, R.H., eds. Riparian ecosystems and their management: reconciling conflicting uses: Proceedings, first North American riparian conference; 1985 April 16-18; Tuscon, AZ. Gen. Tech. Report RM-120. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station: 91-95.

Strahler, A.N. 1957. Quantitative analysis of watershed geomorphology. Transactions American Geophysical Union 38:913-920.

USDA Natural Resources and Conservation Service. 2010. SNOTEL. Snow data network. http://www.wcc.nrcs.usda.gov/snow/

USDA NRCS. 1999. A procedure to estimate the response of aquatic systems to changes in phosphorus and nitrogen inputs. National Water and Climate Center, Natural Resources Conservation Service. Portland, OR.

USEPA. 1996. Biological criteria: technical guidance for streams and small rivers. EPA 822-B-96-001. U.S. Environmental Protection Agency, Office of Water. Washington, DC. 162 p.

USEPA. 2006. Recommended Structure for Category 4b Demonstrations. *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions.* October 12, 2006. URL: http://www.epa.gov/owow/tmdl.

US Fish & Wildlife Service, 1998, Biological Opinion for the Effects to Bull Trout from Continued Implementation of Land and Resource Management Plans and Resource Management Plans as Amended by the Interim Strategy for Managing Fish-producing Watersheds in Eastern Oregon, and Washington, Idaho, Western Montana, and Portions of Nevada (INFISH) and the Interim Strategy for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and portions of California (PACFISH), Region 1, Portland, OR

USFS. 1991. BOISED User's Guide and Program Documentation. Boise National Forest. December 1991. 28 pages + appendices.

USFS. 1998. Summary Report-Pilot Monitoring Project to Assess the Status of Steelhead Habitat in Grazed Systems in Region 4. November 1998.

USFS 2000. Bear Valley Watershed Analysis. Prepared by Shapiro and Associates for the Lowman Ranger District, Boise National Forest.

USFS. 2001. An Inventory and Assessment of Stream Improvement Structures in Bear Valley Idaho. Eric Esselstyn, author.

USFS. 2003. The Frank Church-River of No Return Wilderness Management Plan. Intermountain Region. November 2003.

USFS. 2003. Management Directives (Boise National Forest Plan 2003) Southwest Idaho Ecogroup Boise, Payette and Sawtooth National Forests Revised Land and Resource Mgmt Plans and EIS

USFS. 2010. Bear Valley Watershed Analysis. Lowman Ranger District, Boise National Forest. April 2010. Submitted as a supporting document to this 4b justification.

USFS and Bureau of Land Management, 1995, Decision Notice/Decision Record, Finding of No Significant Impact, Environmental Assessment, for the Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California (PACFISH)

USGS. 1987. Hydrologic unit maps. Water supply paper 2294. United States Geological Survey. Denver, CO. 63 p.

USGS 2007. Streamflow data http://waterdata.usgs.gov/id/nwis/inventory/?site_no=13309000&

USGS, 2010. StreamStats, http:/water.usgs.gov/osw/streamstats

Wendt, George E., Wallace T. Shiverdecker, and Gene F. Cole. 1973. Soil-hydrologic reconnaissance survey - Lowman Ranger District. U.S. Forest Service.

Winward, A.H. 2000. Monitoring the vegetation resources in riparian areas. Gen. Tech. Rep. RMRS-GTR-46. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 49 p.

GIS Coverages

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Glossary

§303(d)

Refers to section 303 subsection "d" of the Clean Water Act. 303(d) requires states to develop a list of water bodies that do not meet water quality standards. This section also requires total maximum daily loads (TMDLs) be prepared for listed waters. Both the list and the TMDLs are subject to U.S. Environmental Protection Agency approval.

Active restoration

Active restoration is generally where capital investments and ground disturbing activities are necessary in the attempt to improve degraded systems and secure a network of connected habitats. Typically, active restoration is required where the habitat is degraded to the point that natural recovery would not be enough to get it to the desired condition or in an appropriate amount of time.

allotment (grazing)

Area designated for the use of a certain number and kind of livestock for a prescribed period of time.

Anti-Degradation

Refers to the U.S. Environmental Protection Agency's interpretation of the Clean Water Act goal that states and tribes maintain, as well as restore, water quality. This applies to waters that meet or are of higher water quality than required by state standards. State rules provide that the quality of those high quality waters may be lowered only to allow important social or economic development and only after adequate public participation (IDAPA 58.01.02.051). In all cases, the existing beneficial uses must be maintained. State rules further define lowered water quality to be 1) a measurable change, 2) a change adverse to a use, and 3) a change in a pollutant relevant to the water's uses (IDAPA 58.01.02.003.61).

Assessment Unit (AU)

A segment of a water body that is treated as a homogenous unit, meaning that any designated uses, the rating of these uses, and any associated causes and sources must be applied to the entirety of the unit.

Burned Area Emergency Response (BAER)

A procedure used by the federal government to restore watershed conditions following large wildfires. The objective of BAER is to provide for immediate rehabilitation by stabilizing soils, and controlling water, sediment, and debris movement.

Batholith

A large body of intrusive igneous rock that has more than 40 square miles of surface exposure and no known floor. A batholith usually consists of coarse-grained rocks such as granite.

Beneficial Use

Any of the various uses of water, including, but not limited to, aquatic life, recreation, water supply, wildlife habitat, and aesthetics, which are recognized in water quality standards.

Beneficial Use Reconnaissance Program (BURP)

A program for conducting systematic biological and physical habitat surveys of water bodies in Idaho. BURP protocols address lakes, reservoirs, and wade able streams and rivers

Best Professional Judgment

A conclusion and/or interpretation derived by a trained and/or technically competent individual by applying interpretation and synthesizing information.

Cubic Feet per Second

A unit of measure for the rate of flow or discharge of water. One cubic foot per second is the rate of flow of a stream with a cross-section of one square foot flowing at a mean velocity of one foot per second. At a steady rate, once cubic foot per second is equal to 448.8 gallons per minute and 10,984 acre-feet per day.

Culturally Induced Erosion

Erosion caused by increased runoff or wind action due to the work of humans in deforestation, cultivation of the land, overgrazing, and disturbance of natural drainages; the excess of erosion over the normal for an area (also see Erosion).

Depth Fines

Percent by weight of particles of small size within a vertical core of volume of a streambed or lake bottom sediment. The upper size threshold for fine sediment for fisheries purposes varies from 0.8 to 6.5 millimeters depending on the observer and methodology used. The depth sampled varies but is typically about one foot (30 centimeters).

Designated Uses

Those water uses identified in state water quality standards that must be achieved and maintained as required under the Clean Water Act.

Disturbance

Any event or series of events that disrupts ecosystem, community, or population structure and alters the physical environment.

Endangered Species Act (ESA)

An act passed by Congress in 1973 intended to protect species and subspecies of plants and animals that are of "aesthetic, ecological, educational, historical, recreational, and scientific value". It may also protect the listed species' critical habitat, the geographic area occupied by or essential to the species. The FWS (USFWS) and NMFS share authority to list endangered species, determine critical habitat, and develop species' recovery plans.

Existing Beneficial Use or Existing Use

A beneficial use actually attained in waters on or after November 28, 1975, whether or not the use is designated for the waters in Idaho's *Water Quality Standards and Wastewater Treatment Requirements* (IDAPA 58.01.02).

Exotic Species

A species that is not native (indigenous) to a region.

Extrapolation

Estimation of unknown values by extending or projecting from known values.

Flow

See *Discharge*.

Fully Supporting

In compliance with water quality standards and within the range of biological reference conditions for all designated and exiting beneficial uses as determined through the *Water Body Assessment Guidance* (Grafe et al. 2002).

Fully Supporting Cold Water

Reliable data indicate functioning, sustainable cold water biological assemblages (e.g., fish, macroinvertebrates, or algae), none of which have been modified significantly beyond the natural range of reference conditions.

Fully Supporting but Threatened

An intermediate assessment category describing water bodies that fully support beneficial uses, but have a declining trend in water quality conditions, which if not addressed, will lead to a “not fully supporting” status.

Habitat

The living place of an organism or community.

Headwater

The origin or beginning of a stream.

Hydrologic Unit

One of a nested series of numbered and named watersheds arising from a national standardization of watershed delineation. The initial 1974 effort (USGS 1987) described four levels (region, subregion, accounting unit, cataloging unit) of watersheds throughout the United States. The fourth level is uniquely identified by an eight-digit code built of two-digit fields for each level in the classification. Originally termed a cataloging unit, fourth field hydrologic units have been more commonly called subbasins. Fifth and sixth field hydrologic units have since been delineated for much of the country and are known as watershed and subwatersheds, respectively.

Hydrologic Unit Code (HUC)

The number assigned to a hydrologic unit. Often used to refer to fourth field hydrologic units.

INFISH

Interim Inland Native Fish Strategy for Intermountain, Northern, and Pacific Northwest Regions (USDA Forest Service).

Key Watershed

A watershed that has been designated in Idaho Governor Batt's *State of Idaho Bull Trout Conservation Plan* (1996) as critical to the long-term persistence of regionally important trout populations.

Macroinvertebrate

An invertebrate animal (without a backbone) large enough to be seen without magnification and retained by a 500µm mesh (U.S. #30) screen.

Management Prescription Category (MPC)

MPCs comprise a range of management prescriptions, from wilderness preservation to concentrated development, that can be applied across the Forest to indicate specific management emphasis in different areas.

Metric

1) A discrete measure of something, such as an ecological indicator (e.g., number of distinct taxon). 2) The metric system of measurement.

Monitoring

A periodic or continuous measurement of the properties or conditions of some medium of interest, such as monitoring a water body.

Mouth

The location where flowing water enters into a larger water body.

Natural Condition

The condition that exists with little or no anthropogenic influence.

Nonpoint Source

A dispersed source of pollutants, generated from a geographical area when pollutants are dissolved or suspended in runoff and then delivered into waters of the state. Nonpoint sources are without a discernable point or origin. They include, but are not limited to, irrigated and non-irrigated lands used for grazing, crop production, and silviculture; rural roads; construction and mining sites; log storage or rafting; and recreation sites.

Not Assessed (NA)

A concept and an assessment category describing water bodies that have been studied, but are missing critical information needed to complete an assessment.

Not Attainable

A concept and an assessment category describing water bodies that demonstrate characteristics that make it unlikely that a beneficial use can be attained (e.g., a stream that is dry but designated for salmonid spawning).

Not Fully Supporting

Not in compliance with water quality standards or not within the range of biological reference conditions for any beneficial use as determined through the *Water Body Assessment Guidance* (Grafe et al. 2002).

Not Fully Supporting Cold Water

At least one biological assemblage has been significantly modified beyond the natural range of its reference condition

Outstandingly remarkable values (ORV)

Outstandingly remarkable values. In the Wild and Scenic Rivers Act, river values identified include scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values and their immediate environments. The Act does not further define outstandingly remarkable values. The Intermountain Region defines outstandingly remarkable value as, "Characteristic of a river segment that is judged to be a rare, unique, or exemplary feature

	that is significant at a regional or national scale (USFS 2003)*”.*
PACFISH	Interim strategies for managing Pacific anadromous fish-producing watersheds in eastern Oregon and Washington, Idaho, and portions of California
Parameter	A variable, measurable property whose value is a determinant of the characteristics of a system, such as temperature, dissolved oxygen, and fish populations are parameters of a stream or lake.
Passive Restoration	Passive restoration is where only management adjustments are required to allow aquatic habitat, water quality and subwatershed functions to restore at its natural rate of recovery.
Perennial Stream	A stream that flows year-around in most years.
Pollutant	Generally, any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.
Reach	A stream section with fairly homogenous physical characteristics.
Reference	A physical or chemical quantity whose value is known and thus is used to calibrate or standardize instruments.
Reference Condition	1) A condition that fully supports applicable beneficial uses with little affect from human activity and represents the highest level of support attainable. 2) A benchmark for populations of aquatic ecosystems used to describe desired conditions in a biological assessment and acceptable or unacceptable departures from them. The

reference condition can be determined through examining regional reference sites, historical conditions, quantitative models, and expert judgment (Hughes 1995).

Reference Site

A specific locality on a water body that is minimally impaired and is representative of reference conditions for similar water bodies.

Resident

A term that describes fish that do not migrate.

Riffle

A relatively shallow, gravelly area of a streambed with a locally fast current, recognized by surface choppiness. Also an area of higher streambed gradient and roughness.

Riparian

Associated with aquatic (stream, river, lake) habitats. Living or located on the bank of a water body.

Riparian Habitat Conservation Area (RHCA)

A U.S. Forest Service description of land within the following number of feet up-slope of each of the banks of streams:

- 300 feet from perennial fish-bearing streams
- 150 feet from perennial non-fish-bearing streams
- 100 feet from intermittent streams, wetlands, and ponds in priority watersheds.

River

A large, natural, or human-modified stream that flows in a defined course or channel or in a series of diverging and converging channels.

Runoff

The portion of rainfall, melted snow, or irrigation water that flows across the surface, through shallow underground zones (interflow), and through ground water to creates streams.

Sediment Delivery

An output of the GRAIP model that is a prediction of the amount of fine sediment added to the stream network as

	a direct result of the existence of roads. This figure is derived from observed attributes of drain point and road line features collected during the GRAIP field inventory, particularly whether or not water draining at a given drain point reaches a stream channel (stream connection).
Sediment Production	An output of the GRAIP model that is a prediction of the amount of fine sediment produced on a given road segment. This figure is derived from observed attributes of road line features collected during the GRAIP field inventory (i.e. surface type and flow path vegetation), the slope and length of a road segment, and a base rate of road sediment production.
Sediments	Deposits of fragmented materials from weathered rocks and organic material that were suspended in, transported by, and eventually deposited by water or air.
Stenothermal	Unable to tolerate a wide temperature range.
Stream	A natural water course containing flowing water, at least part of the year. Together with dissolved and suspended materials, a stream normally supports communities of plants and animals within the channel and the riparian vegetation zone.
Stream Crossing	A type of drain point collected during the GRAIP field inventory characterized by a stream channel that intersects a road and flows for at least part of most years. These features may drain water from the road or cutslope, but their primary purpose is to route water flowing down the hillslope in natural stream channels under (and occasionally over) the road. In order to be classified as a stream crossing, the channel must be continuous above and below the road, have defined banks, be at least one foot wide, have a bed armored with gravel, rock, or sand, and display evidence of flow, even if dry at the time of survey.

Stream Order

Hierarchical ordering of streams based on the degree of branching. A first-order stream is an unforked or unbranched stream. Under Strahler's (1957) system, higher order streams result from the joining of two streams of the same order.

Subbasin

A large watershed of several hundred thousand acres. This is the name commonly given to 4^{th} field hydrologic units (also see Hydrologic Unit).

Subbasin Assessment (SBA)

A watershed-based problem assessment that is the first step in developing a total maximum daily load in Idaho.

Subwatershed

A smaller watershed area delineated within a larger watershed, often for purposes of describing and managing localized conditions. Also proposed for adoption as the formal name for 6^{th} field hydrologic units.

Surface Fines

Sediments of small size deposited on the surface of a streambed or lake bottom. The upper size threshold for fine sediment for fisheries purposes varies from 0.8 to 605 millimeters depending on the observer and methodology used. Results are typically expressed as a percentage of observation points with fine sediment.

Surface Runoff

Precipitation, snow melt, or irrigation water in excess of what can infiltrate the soil surface and be stored in small surface depressions; a major transporter of nonpoint source pollutants in rivers, streams, and lakes. Surface runoff is also called overland flow.

Surface Water

All water naturally open to the atmosphere (rivers, lakes, reservoirs, streams, impoundments, seas, estuaries, etc.) and all springs, wells, or other collectors that are directly influenced by surface water.

Threatened Species

Species, determined by the U.S. Fish and Wildlife Service, which are likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

Threatened, endangered, proposed/petitioned, candidate and sensitive species (TEPCS)

Threatened, endangered, proposed/petitioned, candidate and sensitive species

Total Maximum Daily Load (TMDL)

TMDL is the sum of waste load allocations for point sources, non-point sources, natural background, and a margin of safety. A TMDL specifies the amount of a pollutant that needs to be reduced to meet water quality standards set by the state. TMDL is used in a process to attain water quality standards that (1) identifies water quality problems and contributing pollutant sources, (2) allocates pollution control responsibilities among sources in the watershed, and (3) provides a basis for taking actions needed to restore a water body.

Tributary

A stream feeding into a larger stream or lake.

Water Body

A stream, river, lake, estuary, coastline, or other water feature, or portion thereof.

Water Column

Water between the interface with the air at the surface and the interface with the sediment layer at the bottom. The idea derives from a vertical series of measurements (oxygen, temperature, phosphorus) used to characterize water.

Water Pollution

Any alteration of the physical, thermal, chemical, biological, or radioactive properties of any waters of the state, or the discharge of any pollutant into the waters of the state, which will or is likely to create a nuisance or to render such waters harmful, detrimental, or injurious to public health, safety, or welfare; to fish and wildlife; or to domestic, commercial, industrial, recreational, aesthetic, or other beneficial uses.

Water Quality

A term used to describe the biological, chemical, and physical characteristics of water with respect to its suitability for a beneficial use.

Water Quality Criteria

Levels of water quality expected to render a body of water suitable for its designated uses. Criteria are based on specific levels of pollutants that would make the water harmful if used for drinking, swimming, farming, or industrial processes.

Water Quality Limited

A label that describes water bodies for which one or more water quality criterion is not met or beneficial uses are not fully supported. Water quality limited segments may or may not be on a §303(d) list.

Water Quality Standards

State-adopted and U.S. Environmental Protection Agency-approved ambient standards for water bodies. The standards prescribe the use of the water body and establish the water quality criteria that must be met to protect designated uses.

Watershed

1) All the land which contributes runoff to a common point in a drainage network, or to a lake outlet. Watersheds are infinitely nested, and any large watershed is composed of smaller “subwatersheds.”
2) The whole geographic region which contributes water to a point of interest in a water body.

This term is often associated with the 5th hydrologic code.

Watershed Condition Indicator (WCI)

WCIs are an integrated suite of aquatic (including biophysical components), riparian (including riparian – associated vegetation species), and hydrologic (including uplands) condition measures that are intended to be used at the variety of watershed scales. They assist in determining the current condition of a watershed and should be used to help design appropriate management actions, or to alter or mitigate proposed and or ongoing actions, to move watersheds toward desired conditions. WCIs represent a diagnostic means to determine factors of current condition and assist in determining future conditions associated with implementing management actions or natural restoration over time.

Winward Stability Rating

This rating, historically referred to as the vegetative stability rating, estimates the contribution of the roots of streamside vegetation to bank stability. Species have varying abilities to resist erosion based upon their rooting characteristics, both density and depth or extent.

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Appendices

Appendix 1 Past and Present Pollution Control Efforts

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1987	Bearskin	Bearskin Creek Oxbow	BNF, BPA	• Control erosion at the oxbow and headcutting sites. • Design erosion control structures to move fine sediment out of treatment area. • Create juvenile rearing habitat in the process of providing passage	Project constructed a “cut-off” channel to bypass the existing oxbow (with eroding cutbank) of Bearskin Cr, stabilized the breach with boulder weirs and bank armor and build rock structures to reduce stream headcutting.		Cut-off filled with sediment in approx. 10 years. Pool below 1st sill scoured and was “rocked” (in 1990?). Old cutoff channel revegetated on its own. Should be considered as an effective short-term repair. However, the project reduced meander length and reduced low flow habitat in the oxbow.
1987	Bearskin	Bearskin Dry Channel	BNF,BPA	• Stop sediment flow to Bearskin Cr. By controlling headcutting and sheet erosion	• Base level control structures between road and borrow pit.		Probably not totally necessary. But now that intermittent channel incorporates borrow pit … combined projects may be contributing something…

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1988	Lower Elk, Cache	Juniper Revetment	BNF, BPA	• Control streambank erosion of “dry” naturally unstable vegetation community types. • Increase bank cover, store sediment to allow establishment of riparian species.	• Three sites were treated on Elk Creek and seven sites treated on Bear Valley Creek. • 1900 Juniper were anchored into eroding banks with rebar or duckbill anchors and then held into place with fence posts and wire in the upper bank. • Top end of the tree was placed into or near the water and the butt end extending above the bank. The tree were placed both perpendicular and parallel to the bank. • 1291 feet of hitching rail fence constructed and one 40 ft gully filled with junipers.	1573 feet total	Probably 30% of structures were effective in slowing erosion processes to allow revegetation. As-built report with air photos, diagrams of specific sites and maps in Watershed Files
1988	Bearskin	Bearskin Wet Meadows (above 563 road)		• Control headcutting and lowering of channel bed elevation in deeply incised channel.	• Culvert installed below grade and caused channel to downcut and migrate up valley • Constructed ruble/rock structures to dissipate energy and raise ground water table		Temporary fix worked in reducing channel adjustments as a result of road related adverse effects (downstream where 563 crosses channel)

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1985-1989	Upper Bear Valley	Big Meadows Mine Rehabilitation	Shoshone-Bannock Tribes, BPA	• Stabilize streambanks and stream channels, and control or reduce erosion to near natural levels. • Reduce deposition and/or downstream transport of sediment. • Minimize turbidity and maintain or improve water quality. • Improve aesthetics through revegetation and recontouring of the mined areas. • Create or improve chinook salmon spawning and rearing habitat	• Generally treatment included: Stabilization and revegetation of three stream reaches and two adjacent areas, stream channel alignment revegetation of constructed floodplain and disturbed areas and fencing around enhancement area. • Vertical banks in mined areas were excavated back to provide a floodplain for stream meandering and snowmelt runoff flows. • Banks defining the floodplain limits were stabilized with geotextile fabric, erosion control blanket, vegetation and riprap. • Stream channel realignment was completed on approximately 7,500 feet of channel., to provide a floodplain and meandering channel. This involved excavation of approximately 280,000 cubic yards of material.	7,920 ft	Long term monitoring and walking stream annually shows channel through Big Meadows is processing accelerated sediment. Widening and shallowing from mine to 563 has been slowed/reversed. Combined mine rehab., fencing and allotment management have contributed to improving trend. No one project can be considered as “the fix”. Feasibility and alternative reports by Montgomery Engineering in Watershed Files

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1989	Bearskin	Bearskin Dry Meadow Gully stabilization	BNF, BPA	• Raise water table and stabilize eroding channel with rock and log sediment-trapping structures. • Utilize base-level control structures to dissipate stream energy and prevent headcuts (in forested reach). • Stabilize eroding banks, improve growing condition for vegetation on first bench above active channel.	• Log structures constructed in 1989 totally failed (see 1990) • 16 rock check dams and 4 log control structures installed in dry stream bed. 1700 ft of erosion control blanket was placed to help stabilize banks. 4 large check dams and 12 small check dams were installed on another portion of the channel, to the north.		No results – failed structures.
1989	Wyoming	Bear Valley Creek (campground) Barbs	BNF, BPA	• Control excessive streambank scouring, turn flow away from toe-slope to reduce stream energy on streambank, provide for establishment of riparian species.	• Installed two rock barbs to deflect high flows away from the unstable streambank.		Contributed to reducing energy on streambank , allowing veg. to establish on water's edge. Also created riffle-pool complexity in reaches providing spawning and holding areas.
1989	Lower Elk	Elk Creek Rock/Log Structures	BNF, BPA	• Increase instream habitat complexity (pools and cover) while treating sediment sources.	• 5 rock and large wood structures		Uncertain effectiveness
1989	Lower Elk	Elk Creek Oxbow – new channel construction	BNF, BPA	• Cut off large influx of sediment from intermittent channel within oxbow during runoff. • Promote revegetation of riparian species on unstable, unvegetated streambank. • Store sediment in new cutoff channel, provide for off-channel rearing habitat	• A 217 feet channel was constructed at narrowest part of the point bar to relieve high flow pressure on a 600 foot long eroding bank. The old channel was blocked with a low rock berm to trap sediment and to provide rearing habitat for juvenile chinook.	217 feet of channel	Uncertain. High maintenance project. May be related to change in stream dynamics. Project actually shortened length of reach – likely increased energy and erosion on new channel

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1989-1990	Upper Bear Valley	Willow planting	BNF, BPA	• Plant willows to provide optimum riparian vegetation for channel stability and streambank cover on designated sites on Bear Valley Creek, Big Meadws	• 2500 willows were cut, rooted and planted.		
1990	Bearskin	Bearskin borrow pit	BNF, BPA	• Divert intermittent flow into borrow pit for sediment storage. Construct base-level control structures to dissipate energy and prevent headcutting upstream toward pit.	• 4 rock check dams were constructed to divert intermittent stream into abandoned borrow pit.		Previous work in 1987 to stop headcutting and diversion of intermittent channel into borrow pit can be considered effective in reducing sediment transported into Bearskin Creek.
1990	Bearskin	Bearskin Dry Meadow	BNF, BPA (?)	• Replace rock/log sediment dams constructed in 1989 with rock dams. • Sediment storage, raise ground water table, establish riparian vegetation.	• 16 rock check dams, 9 rock structures and anchoring of woody debris along 400 ft of scoured streambank .	400 ft of channel	Dams, revetments and fencing has set in motion trend to establish “vegetated gully” or longer/increased flow through meadow
1990	Bearskin	Bearskin Electric Let-down fence		• Allow protection/restoration of eroding channel when allotment is grazed.		1 mile	“ “
1990	Bearskin	Bearskin Meadows – west Headcuts		• Control headcutting and lowering of ground water table, stabilize sediment source.	• Rock placed in channel to stop migrating headcuts		“ “
1990	Wyoming	Bruce Meadows Gully Erosion	BNF, BPA	• Rehabilitate gully erosion and stabilize active headcutting. • This projects was first initiated in 1980. removal of diversion ditch from Cold Creek, reshaped and seed gully, road obliteration and fence construction.	• Triangle pasture – treated one large headcut and 6 smaller headcuts.		Band-aid approach, but effective

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1990/ 1992	Upper Bear Valley, Cache	Bear Valley Creek Alpine Fir Revetments	BVFF/TU. IDFG. BNF	• Stabilize sediment source adjacent to Bear Valley Creek (between Mace and Sheep Trail). • Store sediment to allow establishment of riparian species along toe slope.	• Planted willow cuttings behind revetments	300 feet	
1990/ 1991	Upper Bear Valley	Bear Valley Creek Habitat Diversity Structures (rock/log)	BNF, BPA	• Increase instream habitat complexity (pools and cover) while treating sediment sources.	• 21 log and rock structures on BV Creek between Cub Creek and Sheep Trail Creek. • Intent of structures was to increase habitat complexity but actually constructed for bank stability.		Projects worked well at storing sediment between log and water's edge. Vegetation eventually pioneered new deposits. Led to bank stabilization and narrowing of channel.
1990	Wyoming	Lower Bear Valley Creek Barbs (above Fir Cr)	BNF, BPA	• Control excessive streambank scouring, turn flow away from tow-slope to reduce stream energy on streambank, provide for establishment of riparian species	• Constructed 3 barbs – large	One outside meander	Upstream barb moved thalweg and basically limited effectiveness of lower two. Effective in reducing energy on streambank and dropping sediment, allowing veg. to re-establish.
1990-1991	Upper Bear Valley	Bear Valley Creek Willow Planting	BNF, BPA	• Provide optimum riparian vegetation for channel stability and streambank cover.	• Contract work;4576 willows were cut, rooted and planted (the following spring) on Bear Valley Creek in the transfer cabin area.		Approximately 60-70% of plants survived.
1991	Lower Elk	Elk Creek Oxbow sedge planting & willow planting	BNF, BPA	• Stabilize sediment sources in vicinity of oxbow project. • Provide optimum riparian vegetation for channel stability and streambank cover.	• Planted in streambanks of new channel, especially upstream banks that were actively eroding.		See 1989 results for Elk Creek Oxbow

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1991	Upper Bear Valley, Cache	Bear Valley tree deflectors/ planting	BPA, BNF	• Utilize tree deflectors to focus flow away from eroding streambanks	• This was a YCC project which included willow planting and alpine fir revetments for bank stabilization. • Mace Cr to Sheep Trail, misc. bank armoring	400 ft	Highly variable in effectiveness
1991	Wyoming	IDEQ's " adopt-a-stream" project on Bear Valley Creek	BVFF, TU, IDF&G, IDEQ, BNF	• Establish riparian vegetation	• Planted willow cutting and anchored logs along Bear Valley Creek between Poker Meadow Bridge and Fir Creek.		
1991	Cache	Bear Valley Creek habitat complexity	BPA	• Increase habitat complexity on Bear Valley Creek.	• 57 rock and log structures installed on Bear Valley Creek downstream from Sheep Trail		
1991	Wyoming	Cold Creek (Bruce Meadows)	BPA, BNF	• Sediment reduction	• 2 rock check dams constructed in Cold Crek (Bruce Meadow). • Relocated 300 feet of Wyoming Creek road to prevent sediment transport to stream.		
1992	Wyoming	Ayer Meadow Enclosure fence	BNF, BPA	• Allow for protection/restoration of eroding channel when allotment is grazed. • Promote streambank stability by increasing vigor of existing riparian vegetation and allowing for establishment of riparian species where they are not present.	• Constructed fence in Ayers Meadow	2.25 miles	

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
1992	Upper Bear Valley	Big Meadows Enclosure fence	BPA, BNF	• Allow for protection/restoration of eroding channel when allotment is grazed. • Promote streambank stability by increasing vigor of existing riparian vegetation and allowing for establishment of riparian species where they are not present.	• Constructed fence in Big Meadowss	5.25 miles	
1993	Wyoming	Poker Meadows Enclosure fence	BPA, BNF	• Allow for protection/restoration of eroding channel when allotment is grazed. • Promote streambank stability by increasing vigor of existing riparian vegetation and allowing for establishment of riparian species where they are not present.	• Constructed fence in Poker Meadows	2.3 miles	
1993		Willow, sedge, rush planting	BVFF/TU. IDFG, BNF	• Establish riparian vegetation			
1993		Willow planting	IDFG, BNF	• Establish riparian vegetation			
1994		Willow, sedge, rush planting	IDFG, BNF	• Establish riparian vegetation			
1997 **1998**	Lower Elk, Cache	Bear Valley and Elk Creek log barbs	BNF, TU	• Encourage bank building along 6 different reaches of Bear Valley Creek and Elk Creek.	• Log barbs installed along cutbank with hand labor. Single logs placed at an angle to flow and secured in place with fence post and wire onto bank. • 4 reaches treated on Bear Valley Creek, 2 reaches treated on Elk Creek	6 reaches (length?)	Some barbs (about half) have led to successful bank stabilization and vegetative recovery. Others have been ineffective. Proper barb angle is needed to affect positive changes in bank stability.
2001	All 6th HUCs		BPA/USFS	• All grazing allotments retired	• Grazing permit purchased by BPA and allotment retired	48,000 acres	See 2010 Bear Valley Riparian Monitoring Report

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
2004	Cache, Wyoming	Bear Valley Creek - Five Star Restoration Project/NOAA Community based Restoration Program	IDFG, TU, Borah High School, USFS, NAA	• enhance streamside vegetation and improve streambank stability along Bear Valley Creek in previously grazed areas.	• Planted willow and potentilla on 10 hardened livestock stream crossings.		Successful. See IDFG accomplishment report
2004	Fir Creek	Fir Creek Campground Riparian Protection	USFS	• Protect Bear Valley Creek streambanks from excessive damage from campers accessing the river.	• Fence constructed and river access areas designated along Bear Valley Creek at Fir Creek campground. • Riparian shrubs planted along Bear Valley Creek	0.25 mi	Successful. Access to the river reduced to specific locations.
2005	Upper Bear Valley	Casner Creek Culvert Replacement	USFS	• Fish passage restoration • Accommodation of 100-year flow	• Replaced fish barrier culvert with an open bottom arch at the 582 road crossing of Casner Creek,	1 crossing treated, Improved access to 4 mi of upstream habitat	Successful. Improved habitat access upstream to 4 additional miles. See Casner and Cub Creek culvert Replacement Turbidity Monitoring Report.
2005	Upper Bear Valley	Cub Creek Culvert Replacement	USFS	• Fish passage restoration • Accommodation of 100-year flow	• Replaced fish barrier culvert with an open bottom arch at the 563 road crossing of Cub Creek,	1 crossing treated, Improved access to 2 mi of upstream habitat	Successful. Improved habitat access to an additional 2 miles of habitat upstream. See Casner and Cub Creek culvert Replacement Turbidity Monitoring Report.
2005	Upper Bear Valley	Casner spur culvert removal	USFS	• Fish passage restoration • Accommodation of 100-year flow	• Removed multiple culverts at one crossing upstream of the 582 crossing of Casner Creek. • Established a natural streambank and transplanted riparian vegetation.	1 crossing treated	Successful. Improved habitat access upstream. Restored riparian area.

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
2006	Upper Bear Valley Creek	Cub/Casner culvert Replacement Revegetation	USFS	• Re-establish riparian vegetation in culvert replacement areas	• Planted native shrubs on streambanks disturbed during the culvert replacement projects on Cub and Casner Creeks.	2 acres	Successful. Riparian vegetation density improving each year following culvert replacement projects.
2006	Wyoming, Lower Elk, Cache	Red Mountain Burned Area Emergency Rehabilitation	USFS	• Erosion prevention	• Aerial straw mulching of high severity burned slopes to prevent erosion.		Successful in treated areas. BAER aquatic habitat monitoring report 2007-2009.
2008	Fir Creek, Wyoming	Campground revegetation		• Re-establish grass and forbs within the Fir Creek and Bear Valley Creek campground areas	• Spread native grass seed and fertilizer in the campground areas recently disturbed by Mountain Pine Beetle prevention project.	3 acres	Some success, will continue revegetation efforts.
2009	Fir Creek	Fir Creek Culvert Replacement	USFS, NOAA	• Fish passage restoration • Accommodation of 100-year flow	• Removed culvert and replaced with a bridge on the 579 crossing of Fir Creek	1 bridge installation	Successful. Improved access to upstream habitat, removed potential for channel blockage (culvert).
2010	Upper Bear Valley	Casner Creek Stream Rehabilitation Project	USFS, IDEQ, SW Idaho RAC, Trout Unlimited	• Mitigation of straightening of creek during dredging era	• Removal of berm along west streambank (1500 cubic yards) and installation of 10 biolog structures to allow creek to overflow banks and begin meander initiation	0.5 mile	Casner Creek Restoration Monitoring Report (CH2M Hill, Trout Unlimited), includes cross-sections, longitudinal profile, photo points, and riparian vegetation monitoring.
2010	Cache	Sack Creek Culvert Replacement	USFS, USFWS, Valley County	• Fish passage restoration • Accommodation of 100-year flow	• Removed triple culvert crossing of the 582 road over Sack Creek and replace with a bridge.	1 bridge installation	Successful. Improved access to upstream habitat, removed potential for channel blockage (culvert).
2011 Planned	Upper Bear Valley, Cache, Wyoming, Fir, Lower Elk, Bearskin	Road Reconstruction and Heavy Maintenance	USFS	• Reduce sediment delivery from roads to streams.	• Repair road segments identified in 2009 GRAIP survey		

Year	6th Field HUC name	Project	Partners	Objectives	Actions	Length/ Area Treated	Subjective Results and Reports
2011 Planned	Lower Elk	Tennessee Culvert Replacement	USFS, Valley County	• Fish passage restoration • Accommodation of 100-year flow	• Replace existing culvert with a bottomless arch at the 579 crossing of Tennessee Creek	1 crossing	

Appendix 2. Additional USFS Completed Actions and Recommended Actions (Bear Valley Watershed Analysis 2000) in Bear Valley Creek Watershed to Improve Riparian Habitat but Not Necessary for Attainment of Water Quality Standards

Action	Completed
The 300 foot allowance of vehicles in proximity to streams may not be consistent with RCA objectives • Inventory tracks and wheel ruts in all meadows and highlight those in wet meadows • Determine those that need to have access blocked	No-(work not started or scheduled)
Construct proper parking, sanitary facilities and stock unloading/holding areas on the flat east of the Fir Creek Bridge. Improve all trailhead parking areas and access roads to design standards that prevent vehicle damage to road surfaces and adjacent areas	No -(work not started or scheduled)
Inventory the dispersed campsites and access routes. Determine which meet area recreation/watershed goals, and which are or will become damaging.	In process
Educate the public as a strategy to protect meadows from further off road vehicle use	Yes- Education through direct contact, signs in meadows has resulted in a decrease in traffic onto meadow
Highlight Bear Valley's importance as a fragile stronghold for anadromous fish in the Snake River Basin, its unique meadow system and important fish, wildlife and recreation resources and their relationships. Inform the public of their responsibilities as users of public lands as well as their opportunities to maintain and improve the environment	Yes - Completed and ongoing Kiosks in place at Cape Horn and Bruce Meadows Rest Stops
Gain control of off road dispersed campsites and access roads	In process
Initiate a system that allows use of only those campsites and routes where use is permissible	In progress. District Motor Vehicle Use Map restricts access to designated routes only.
Reconstruct the Bear Valley and Fir Creek campgrounds in a manner that will control traffic flow and improve road and parking surfaces. Replace the sanitary facilities	Yes -sanitary facilities replaced with vault toilets and boulders added to restrict vehicles.
Replace the sanitary facilities at the Bruce Meadows Rest Area	Yes – new vault toilets installed.

Appendix 3. Boise Forest Plan Management Area 12 (Bear Valley) Direction (USDA Forest Service 2003a).

**The comprehensive Forestwide Management Direction Goals, Objectives, Standards and Guides can be found in Volume 1 of the Boise National Forest Plan (2003). Many of these are expressly dealing with working with IDEQ and the attainment beneficial uses and delisting of 303(d) impaired water bodies.*

MPC/Resource Area	Direction	Number	Management Direction Description
MPC 1.2 Recommended Wilderness	General Standard	1202	Management actions, including wildland fire use and prescribed fire, must be designed and implemented in a manner that maintains wilderness values, as defined in the Wilderness Act.
	Vegetation Standard	1203	Mechanical vegetation treatments, including salvage harvest, are prohibited.
	Recreation Standard	1204	No new motorized or mechanical uses will be allowed, except where these uses must be allowed in response to reserved or outstanding rights, statute or treaty.
	Recreation Standard	1205	Existing motorized or mechanical uses are allowed only if they do not lead to long-term adverse changes in wilderness values.
MPC 1.2 Recommended Wilderness	Road Standard	1206	Road construction or reconstruction may only occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty.
	Fire Guideline	1207	The full range of fire suppression strategies may be used to suppress wildfires. Fire suppression tactics should minimize impacts to wilderness values.
	General Standard	1208	Manage the Bear Valley Creek and Elk Creek eligible river corridors to their assigned classification standards, and preserve their ORVs and free-flowing status until the segments undergo a suitability study and the study finds them suitable for designation by Congress, or releases them from further consideration as Wild and Scenic Rivers.
MPC 2.1 Wild and Scenic Rivers	Vegetation Guideline	1209	In Scenic or Recreational corridors, mechanical vegetation treatments, including salvage harvest, may be used as long as ORVs are maintained within the river corridor.
	Fire Guideline	1210	Prescribed fire and wildland fire use may be used as long as ORVs are maintained within the corridor.
	Fire Guideline	1211	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize tactics that minimize the impacts of suppression activities on river classifications and ORVs.

MPC/Resource Area	Direction	Number	Management Direction Description
	General Standard	1212	Management actions, including salvage harvest, may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary time period (up to 3 years), and must be designed to avoid resource degradation in the short term (3-15 years) and long term (greater than 15 years).
MPC 3.1 Passive Restoration and Maintenance of Aquatic, Terrestrial, and Watershed Resources	Vegetation Standard	1213	Mechanical vegetation treatments, excluding salvage harvest, may only occur where: a) The responsible official determines that wildland fire use or prescribed fire would result in unreasonable risk to public safety and structures, investments, or undesirable resource affects; and b) They maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or c) They maintain or restore habitat for native and desired non-native wildlife and plant species.
	Fire Standard	1214	Wildland fire use and prescribed fire may only be used where they: a) Maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species, or b) Maintain or restore habitat for native and desired non-native wildlife and plant species.
	Road Standard	1215	Road construction or reconstruction may only occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty, or c) To address immediate response situations where, if the action is not taken, unacceptable impacts to hydrologic, aquatic, riparian or terrestrial resources, or health and safety, would result.
	Fire Guideline	1216	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize suppression strategies and tactics that minimize impacts on aquatic, terrestrial, or watershed resources.
MPC 3.1	General Standard	1217	Management actions, including salvage harvest, may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary (up to 3 years) or short-term (3-15 years) time periods, and must be designed to avoid degradation of existing conditions in the long-term (greater than 15 years).

MPC/Resource Area	Direction	Number	Management Direction Description
MPC 3.2 Active Restoration and Maintenance of Aquatic, Terrestrial, and Watershed Resources	Vegetation Standard	1218	Vegetation restoration or maintenance treatments—including wildland fire use, mechanical, and prescribed fire—may only occur where they: a) Maintain or restore water quality needed to fully support beneficial uses and habitat for native and desired non-native fish species; or b) Maintain or restore habitat for native and desired non-native wildlife and plant species; or c) Reduce risk of impacts from wildland fire to human life, structures, and investments.
	Road Standard	1219	Road construction or reconstruction may only occur where needed: a) To provide access related to reserved or outstanding rights, or b) To respond to statute or treaty, or c) To support aquatic, terrestrial, and watershed restoration activities, or d) To address immediate response situations where, if the action is not taken, unacceptable impacts to hydrologic, aquatic, riparian or terrestrial resources, or health and safety, would result.
	Fire Guideline	1220	The full range of fire suppression strategies may be used to suppress wildfires. Emphasize suppression strategies and tactics that minimize impacts on aquatic, terrestrial, or watershed resources.
	Objective	1221	Implement opportunities identified in the Bear Valley Watershed Analysis.
Soil, Water, Riparian, and Aquatic Resources	Objective	1222	De-list Bear Valley Creek and Elk Creek from the State of Idaho's impaired water bodies list by applying appropriate vegetation manipulation, road management, and active watershed restoration to reduce sediment, which is the identified pollutant source.
	Objective	1223	Remove barriers that are impeding migration of anadromous and resident native fish in Upper Bear Valley Creek subwatershed. Restore channel integrity from past land management activities.
	Objective	1224	Reconstruct or relocate Forest Road 582 in Upper Bear Valley Creek subwatershed to reduce impacts to fish habitat and water quality.
	Objective	1225	Restore and maintain riparian function and allow the stream channels to return to their natural condition. Prioritize restoration where impacts to chinook salmon, steelhead trout, and bull trout spawning/rearing habitats can be quickly reduced, and benefits to water quality and fish species can be maximized.
	Objective	1226	Restore and maintain habitat connectivity for all species of native fish throughout the Bear Valley drainage.
	Objective	1227	Work with Idaho Department of Fish and Game to maintain the genetic integrity of native trout populations in the high mountain lakes at the headwaters of Cache Creek.

MPC/Resource Area	Direction	Number	Management Direction Description
	Objective	1228	Maintain habitat conditions to contribute to the strong bull trout populations in the Wyoming, Cache, and Bearskin subwatersheds.
Soil, Water, Riparian, and Aquatic Resources	Objective	1229	Reduce sediment by improving road alignment, drainage, and surface materials.
	Objective	1230	Restore the desired composition and structure in lodgepole pine areas (as described in Appendix A) to create a mosaic pattern of age classes, and to reduce the risk of uncharacteristic disturbance.
Vegetation	Objective	1231	Restore the early seral aspen component in the forested vegetation groups, as described in Appendix A, to restore wildlife habitat and improve visual quality.
	Objective	1232	Maintain or restore known populations and occupied habitats of TEPCS plant species, including Blandow's helodium, to contribute to the long-term viability of these species.
Botanical Resources	Objective	1233	Eradicate existing infestations of noxious weeds, and prevent new infestations from occurring.
Non-native Plants	Objective	1234	Cooperate with the Idaho Department of Fish and Game to promote a Watchable Wildlife Program related to the high-elevation mountain meadow complexes.
Wildlife Resources	Objective	1235	Restore wildlife habitat and wildlife forage by reducing lodgepole pine density in meadows that is occurring due to the lack of fire and natural disturbance processes.
	Objective	1236	Improve Fir Creek and Bear Valley Campgrounds to protect fisheries resources.
Recreation Resources	Objective	1237	Improve Fir Creek, Wyoming Creek, and Lost Lake trailheads to enhance trail access and recreation opportunities, while reducing current resource impacts.
	Objective	1238	Inventory and evaluate dispersed sites to determine whether there is a need to close them or improve them through hardening, barrier placement, or other means.
	Objective	1239	Maintain the current motorized access on the trail system.
	Objective	1240	Continue the permit system to the use the Cook Ridge and Wilson Creek road network for disabled hunting.
	Objective	1241	Evaluate the need to restore the existing Sack Creek motorized trail. If the evaluation determines that restoration is needed, develop a plan to complete trail restoration.

<table>
<tr><th>MPC/Resource Area</th><th>Direction</th><th>Number</th><th>Management Direction Description</th></tr>
<tr><td rowspan="2"></td><td>Objective</td><td>1242</td><td>Achieve or maintain the following ROS strategy:
<table><tr><th rowspan="2">ROS Class</th><th colspan="2">Percent of Mgt. Area</th></tr><tr><th>Summer</th><th>Winter</th></tr><tr><td>Semi-Primitive Non-Motorized</td><td>32%</td><td>8%</td></tr><tr><td>Semi-Primitive Motorized</td><td>7%</td><td>92%</td></tr><tr><td>Roaded Natural</td><td>30%</td><td>0%</td></tr><tr><td>Roaded Modified</td><td>31%</td><td>0%</td></tr></table>
The above numbers reflect current travel regulations. These numbers may change as a result of future travel regulation planning.</td></tr>
<tr><td>Objective</td><td>1243</td><td>Identify, protect, and interpret historic properties in the management area, specifically prehistoric sites in Bear Valley.</td></tr>
<tr><td>Cultural Resources</td><td>Objective</td><td>1244</td><td>Maintain the National Register status of Elk Creek Guard Station, which is on the Forest’s cabin rental program, Bear Valley Lookout, and other eligible properties in the area. Monitor the conditions of National Register eligible properties in the management area.</td></tr>
<tr><td rowspan="4">Cultural Resources</td><td>Objective</td><td>1245</td><td>Conduct an inventory to identify the camas meadows and associated prehistoric sites in Bear Valley.</td></tr>
<tr><td>Objective</td><td>1246</td><td>Nominate Elk Creek Guard Station and Bear Valley Lookout to the NRHP. Develop maintenance plans for these facilities, and interpretive materials for visitors using the guard station.</td></tr>
<tr><td>Objective</td><td>1247</td><td>Provide interpretation at Bruce Meadows Rest Area and campgrounds about the people and events that shaped Bear Valley’s history.</td></tr>
<tr><td>Objective</td><td>1248</td><td>Cooperate with the Shoshone/Bannock Tribe for habitat restoration of aquatic and wildlife species.</td></tr>
<tr><td rowspan="2">Tribal Rights And Interests</td><td>Objective</td><td>1249</td><td>Continue to consult with the Shoshone/Bannock Tribe during project development, design, and implementation.</td></tr>
<tr><td>Objective</td><td>1250</td><td>Complete the reclamation of the Casner Creek mining ditch to reduce impacts to other Forest resources.</td></tr>
</table>

MPC/Resource Area	Direction	Number	Management Direction Description
Mineral Resources	Objective	1251	Identify areas appropriate for wildland fire use, focusing on the Inventoried Roadless Areas, particularly those assigned MPC 1.2. Use wildand fire to restore or maintain vegetative desired conditions and to reduce fuel loadings.
Fire Management	Guideline	1252	Coordinate with the Salmon-Challis National Forest to develop compatible wildland fire suppression and wildland fire use strategies.
	Objective	1253	Maintain Bear Valley Mountain Lookout as a communication site.
Lands and Special Uses	Objective	1254	Reduce unauthorized ATV use and enforce existing travel restrictions to reduce recreation impacts to wildlife, soil, and water resources.
Facilities and Roads	Objective	1255	Cooperate with the State of Idaho on maintenance of the Bruce Meadows airfield to efficiently maintain this transportation facility.
	Objective	1256	Evaluate vehicle-related impacts to help determine the level and type of vehicle use appropriate for the area, both on and off the existing network of roads and trails.
	Objective	1257	Maintain the scenic values of high-elevation meadow complexes.
Scenic Environment	Standard	1258	Meet the visual quality objectives as represented on the Forest VQO Map, and where indicated in the table below as viewed from the following areas/corridors:
	General Standard	1201	Defer implementation of any development within the Bluebunch Inventoried Roadless Area pending re-evaluation for wilderness recommendation by the Salmon-Challis National Forest.

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Appendix H. Category 4b—Waters of the State That Have Pollution Control Requirements in Place, Other Than a TMDL, and Are Expected to Meet Standards

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2010 Integrated Report: Category 4b: Impaired Waters Expected to Meet Standards

2010 Integrated Report: Category 4b: Impaired Waters Expected to Meet Standards

Salmon

17060205 Upper Middle Fork Salmon

ID17060205SL012_02a	Upper Bear Valley Creek and tributaries - 1st and 2nd order	28.86	MILES

Sedimentation/Siltation

ID17060205SL012_05	Bear Valley Creek - 5th order	11.24	MILES

Sedimentation/Siltation

ID17060205SL013_03	Bearskin Creek - 3rd order (Little Beaver to Elk Creek)	1.83	MILES

Sedimentation/Siltation

ID17060205SL013_04	Elk Creek - 4th order	8.94	MILES

Sedimentation/Siltation

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Appendix I. Category 4c—Waters of the State Not Impaired by a Pollutant

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2010 Integrated Report: Category 4c: Waters Impaired by Pollution, Not a Pollutant

2010 Integrated Report: Category 4c: Waters Impaired by Pollution

Bear River

16010102 Central Bear

ID16010102BR001_05	Bear River - Idaho/Wyoming border to railroad bridge (T14N,	30.87	MILES

Low flow alterations — In 2006 EPA approved nutrient and sediment TMDLs. No TMDL written for flow alteration per EPA policy that "flow alteration is not a pollutant"

ID16010102BR002_03	Pegram Creek - source to mouth	6.27	MILES

Physical substrate habitat alterations

ID16010102BR006_02	Preuss Creek - USFS boundary to Geneva ditch	6.07	MILES

Physical substrate habitat alterations

16010201 Bear Lake

ID16010201BR002_05	Bear River -railroad bridge (T14N, R45E, Sec. 21) to Ovid Cr	54.43	MILES

Low flow alterations

ID16010201BR006_03	Lower Stauffer Creek - Spring Creek to Bear River	4.14	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010201BR018_0La	Indian Creek	2.94	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010201BR022_03a	Lower Georgetown Creek - left hand fork to mouth	3.89	MILES

Physical substrate habitat alterations

16010202 Middle Bear

ID16010202BR002_04	Cub River - Maple Creek to Border	3.94	MILES

Low flow alterations

Other flow regime alterations

ID16010202BR003_03	Cub River - Sugar Creek to Maple Creek	5.29	MILES

Other flow regime alterations

ID16010202BR006_06	Bear River - Oneida Narrows Reservoir Dam to Idaho/Utah bord	36.08	MILES

Low flow alterations

ID16010202BR007_02a	Strawberry Creek	10.39	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010202BR009_06	Bear River - Alexander Reservoir Dam to Denismore Creek	15.57	MILES

Other flow regime alterations

ID16010202BR009_06a	Bear River - Denismore Cr to above Oneida Reservoir	21.56	MILES

Low flow alterations

ID16010202BR013_02	Densmore Creek - source to mouth	22.86	MILES

Low flow alterations

ID16010202BR015_04	Battle Creek - source to mouth	14.56	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010202BR018_02b	Swan Lake Creek	13.8	MILES

Low flow alterations

ID16010202BR020_02	Weston Creek - unnamed tributaries	29.81	MILES

Other flow regime alterations

ID16010202BR020_02c	upper Weston Creek - FS boundary to reservoir	12.17	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010202BR020_02d	Weston Cr - HW to FS boundary and Trail Hollow	10.74	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010202BR020_03	Weston Creek - Dry Canyon to above Weston City	8.3	MILES

Other flow regime alterations

ID16010202BR020_04	Weston Creek - above Weston City to Bear River	4.7	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010202BR021_02	Jenkins Hollow (Newton Creek)	12.62	MILES

Physical substrate habitat alterations

ID16010202BR021_02a	Steel Canyon	0.9	MILES

Physical substrate habitat alterations

16010204 Lower Bear-Malad

ID16010204BR001_02b	Four Mile Canyon	7.59	MILES

Physical substrate habitat alterations

ID16010204BR001_02d	Henderson Creek	4.97	MILES

Physical substrate habitat alterations

ID16010204BR001_04	Malad River - Little Malad River to Idaho/Utah border	21.48	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010204BR002_02a	Campbell Creek	2.86	MILES

Physical substrate habitat alterations

ID16010204BR006_02	Susan Hollow	4.04	MILES

Physical substrate habitat alterations

ID16010204BR008_04	Little Malad River - Daniels Reservoir Dam to mouth	24.55	MILES

Low flow alterations

Physical substrate habitat alterations

ID16010204BR010_03	middle Wright Creek - Indian Mill Canyon to Dairy Creek	2.72	MILES

Physical substrate habitat alterations

ID16010204BR011_03	Dairy Creek - source to mouth	5.5	MILES

Low flow alterations

Physical substrate habitat alterations

16020309 Curlew Valley

ID16020309BR001_03	Deep Creek - Rock Creek to Idaho/Utah border	44.85	MILES

Low flow alterations

ID16020309BR002_02a	Sheep Creek	13.37	MILES

Physical substrate habitat alterations

ID16020309BR003_02a	Meadow Brook Creek	28.93	MILES

Physical substrate habitat alterations

ID16020309BR003_03a	Rock Creek	3.72	MILES

Physical substrate habitat alterations

Clearwater

17060108 Palouse

ID17060108CL001_02	Cow Creek - source to Idaho/Washington border	84.63	MILES

Physical substrate habitat alterations

ID17060108CL001_03	Cow Creek - source to Idaho/Washington border	10.71	MILES

Physical substrate habitat alterations

ID17060108CL002_03	South Fork Palouse River - Gnat Creek to Idaho/Washington bo	8.25	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL003_02	South Fork Palouse River - source to Gnat Creek; tribs	14.51	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL003_03	South Fork Palouse River - source to Gnat Creek	1.92	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL005_02	Paradise Creek - Urban boundary to Idaho/Washington border	6.62	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL005_02a	Paradise Creek - forest habitat boundary to Urban boundary	22.34	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL005_02b	Idlers Rest Creek - source to forest habitat boundary	5.49	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL011a_02	Flannigan Creek - source to T41N, R05W, Sec. 23	18.03	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL011a_03	Flannigan Creek - source to T41N, R05W, Sec. 23	3.06	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL011b_02	Flannigan Creek - T41N, R05W, Sec. 23 to mouth	2.92	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL011b_03	Flannigan Creek - T41N, R05W, Sec. 23 to mouth	3.71	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL012_03	Rock Creek-confluence of WF and EF Rock Cr to mouth	1.73	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL013a_02	West Fork Rock Creek - source to T41N, R04W, Sec. 30	5.68	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL013b_03	West Fork Rock Creek - T41N, R04W, Sec. 30 to mouth	1.4	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL014a_02	East Fork Rock Creek - source to T41N, R 04W, Sec. 29	2.22	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL014b_02	East Fork Rock Creek - T41N, R 04W, Sec. 29 to mouth	1.67	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL015a_02	Hatter Creek - source to T40N, R04W, Sec. 3	17.3	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL015b_02	Hatter Creek - T40N, R04W, Sec. 3 to mouth	20.47	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL015b_03	Hatter Creek - T40N, R04W, Sec. 3 to mouth	5.23	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL027a_02	Big Creek - source to T42N, R03W, Sec. 08	5.23	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL027b_02	Big Creek - T42N, R03W, Sec. 08 to mouth	15.49	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL029_02	Gold Creek - T42N, R04W, Sec. 28 to mouth	1.45	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL029_03	Gold Creek - T42N, R04W, Sec. 28 to mouth	1.78	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL030_02	Gold Creek - source to T42N, R04W, Sec. 28	19.96	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL032a_02	Deep Creek - source to T42, R05, Sec. 02	23.76	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL032a_03	Deep Creek - source to T42, R05, Sec. 02	0.63	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL032b_02	Deep Creek - T42, R05, Sec. 02 to mouth	15.29	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060108CL032b_03	Deep Creek - T42, R05, Sec. 02 to mouth	6.18	MILES

Other flow regime alterations

Physical substrate habitat alterations

17060305 South Fork Clearwater

ID17060305CL001_02	South Fork Clearwater River - Butcher Creek to mouth	25.7	MILES

Physical substrate habitat alterations

ID17060305CL001_05	South Fork Clearwater River - Butcher Creek to mouth	12.6	MILES

Physical substrate habitat alterations

ID17060305CL002_02	Cottonwood Creek - Cottonwood Creek waterfall (9.0 miles ups	24.33	MILES

Physical substrate habitat alterations

ID17060305CL002_04	Cottonwood Creek - 4th order; waterfall to mouth	9.13	MILES

Physical substrate habitat alterations

ID17060305CL003_02	Cottonwood Creek - source to Cottonwood Creek waterfall	39.22	MILES

Physical substrate habitat alterations

ID17060305CL003_03	Cottonwood Creek - source to Cottonwood Creek waterfall	0.39	MILES

Physical substrate habitat alterations

ID17060305CL003_04	Cottonwood Creek - source to Cottonwood Creek waterfall	7.54	MILES

Physical substrate habitat alterations

ID17060305CL008_02	South Fork Cottonwood Creek - source to mouth	24.98	MILES

Physical substrate habitat alterations

ID17060305CL008_03	South Fork Cottonwood Creek - 3rd order segment	5.02	MILES

Physical substrate habitat alterations

ID17060305CL010_02	Threemile Creek - source to unnamed tributary	47.67	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060305CL010_03	Threemile Creek - Unnamed tributary to mouth	2.18	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060305CL011_02	Butcher Creek - source to mouth	18.88	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060305CL012_02	South Fork Clearwater River - sidewall tributaries	46.75	MILES

Physical substrate habitat alterations

ID17060305CL012_02a	Schwartz Creek	44.47	MILES

Other flow regime alterations

ID17060305CL012_05	South Fork Clearwater River - Johns Creek to Butcher Creek	23.17	MILES

Physical substrate habitat alterations

ID17060305CL022_02	Huddleson Creek and tributaries	33.91	MILES

Physical substrate habitat alterations

ID17060305CL022_02a	Granite Creek	4.08	MILES

Physical substrate habitat alterations

ID17060305CL022_05	South Fork Clearwater River - Tenmile Creek to Johns Creek	11.78	MILES

Physical substrate habitat alterations

ID17060305CL030_02	South Fork Clearwater River - Crooked River to Tenmile Creek	28.39	MILES

Physical substrate habitat alterations

ID17060305CL030_05	South Fork Clearwater River - Crooked River to Tenmile Creek	11.76	MILES

Physical substrate habitat alterations

ID17060305CL036_02	South Fork Clearwater River - tributaries	2.49	MILES

Physical substrate habitat alterations

ID17060305CL036_05	South Fork Clearwater River - 5th order mainstem segment	3.96	MILES

Physical substrate habitat alterations

17060306 Clearwater

ID17060306CL003_02	Lindsay Creek - source to mouth	23.36	MILES

Low flow alterations

Physical substrate habitat alterations

ID17060306CL003_03	Lindsay Creek - source to mouth	3.64	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL006_02	Sweetwater Creek - source to Webb Creek	47.72	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL006_03	Sweetwater Creek - source to Webb Creek	3.16	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL006_04	Sweetwater Creek - source to Webb Creek	6.74	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL007_02	Webb Creek - source to mouth	34.87	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL009_03	Lapwai Lake	86.49	ACRES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL010_02	Lapwai Creek - source to Winchester Lake	13.84	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL010_03	Lapwai Creek - source to Winchester Lake	1.31	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL019_02	Holes Creek - source to mouth	26.12	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL019_03	Holes Creek - source to mouth	2.71	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL020_03	Long Hollow Creek - source to mouth	4.04	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL023_02	Sixmile Creek - source to mouth	32.7	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL023_03	Sixmile Creek - source to mouth	0.66	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL024_02	Lawyer Creek - source to mouth	239.16	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL024_03	Lawyer Creek - source to mouth	20.48	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL025_02	Sevenmile Creek - source to mouth	23.59	MILES

Physical substrate habitat alterations

ID17060306CL025_03	Sevenmile Creek - source to mouth	2.43	MILES

Physical substrate habitat alterations

ID17060306CL031_02	Jim Brown Creek - 1st and 2nd Order Tributaries	44.63	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL034_04	Jim Ford Creek - waterfall (12.5 miles upstream) to mouth.	12.21	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL035_02	Heywood, Wilson Creeks and tributaries	48.63	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL035_03	Jim Ford Creek - source to Jim Ford Cr waterfall (12.5 mi)	6.39	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL035_04	Jim Ford Creek - source to Jim Ford Creek waterfall (12.5 mi	3.87	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL036_02	Grasshopper Creek - source to mouth	19.57	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL036_03	Grasshopper Creek - source to mouth	4.3	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL037_03	Winter Creek - waterfall (3.4 miles upstream) to mouth	2.41	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL038_02	Winter Creek - source to Winter Cr waterfall (3.4 miles upst	6.77	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL041_02	Bedrock Creek - source to mouth	19.94	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL043_02	Pine Creek - source to mouth	25.2	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL044_06	Potlatch River - 6th Order	16.36	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL045_05	Potlatch River - 5th Order	18.48	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL046_04	Cedar Creek - 4th Order	5.18	MILES

Physical substrate habitat alterations

ID17060306CL048_04	Potlatch River - 4th Order	6.66	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL048_05	Potlatch River - 5th Order	7.7	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL049_02	Potlatch River - headwaters	61.68	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL049_03	Potlatch River - 3rd Order	5.3	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL049_04	Potlatch River - 4th Order	3.71	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL051_04	East Fork Potlatch River - 4th Order	4.73	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL052_03	Ruby Creek - 3rd Order	2.14	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL053_02	Moose Creek - headwaters	15.72	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL053_03	Moose Creek - 3rd Order	5.08	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL055_02	Pine Creek - headwaters	35.97	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL055_03	Pine Creek - 3rd Order	3.87	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL062_02	Middle Potlatch Creek - headwaters	45.85	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL062_03	Middle Potlatch Creek - 3rd Order	14.47	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060306CL067_02	Hatwai Creek - source to mouth	44.78	MILES

Physical substrate habitat alterations

17060307 Upper North Fork Clearwater

ID17060307CL001_02a	Sneak Creek - source to mouth	5.38	MILES

Physical substrate habitat alterations

17060308 Lower North Fork Clearwater

ID17060308CL002_02a	Swamp Creek - 1st and 2nd Order Tributaries	12.74	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL002_03a	Swamp Creek - 3rd order, Follet Creek to Dworshak Reservoir	0.72	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL002_04	Elk Creek - Cedar Creek to Dworshak Reservoir	8.34	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL002_04a	Long Meadow Creek - un-named trib to Dworshak Reservoir	1.45	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL020_04a	Breakfast Creek - 4th Order, Stony Cr to Dworshak Reservoir	1.91	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL025_02	Breakfast Creek - source to Stony Creek	10.04	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL028_02	Swamp Creek - source to Dworshak Reservoir	1.79	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL028_03	Swamp Creek - source to Dworshak Reservoir	3	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL029_02	Cranberry Creek - source to Dworshak Reservoir	14.25	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL030_03a	Elk Creek - 3rd Order, Reservoir to Elk Creek Falls	7.57	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL030_03b	Elk Creek - Elk Creek Falls to conflence of Deep Creek	4.5	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL030_04	Elk Creek - confluence of Deep Creek to Cedar Creek	3.66	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL034_02	Three Bear, Round Meadow, Oviatt Creeks and tributaries	58.48	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL034_02a	Long Meadow Creek	1.2	MILES

Low flow alterations

Physical substrate habitat alterations

ID17060308CL034_03	Long Meadow Creek - 3rd Order	7.7	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060308CL034_04	Long Meadow Creek - 4th Order	4.4	MILES

Other flow regime alterations

Physical substrate habitat alterations

Panhandle

17010104 Lower Kootenai

ID17010104PN036_03	Fleming Creek - lower	3.49	MILES

Other flow regime alterations

Physical substrate habitat alterations

17010214 Pend Oreille Lake

ID17010214PN010_03	Brickel Creek - Idaho/Washington border to mouth	5.62	MILES

Physical substrate habitat alterations

This cause of impairment AU was assessed on 12/15/2009 by CDA RO Staff (R.Steed, K. Keith, T. Herron, J. Bergquist, G. Pettit) The lower portion of Brickle Creek has been straightened and otherwise modified. This modification has greatly contributed to the poor habitat conditions that exist, making it impossible to collect macroinvertebrates. It would be unreasonable to expect to get passing bug scores from habitat alone, or evaluate as a lotic water body. Other water quality issues are likely to exist upstream and stressor identification should be pursued.

ID17010214PN018L_0L	Pend Oreille Lake	80827.85	ACRES

Other flow regime alterations

17010301 Upper Coeur d Alene

ID17010301PN001_05	North Fork Coeur d'Alene River, below Prichard Cr.	26.29	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17010301PN030_03	Little NF CDA River - btw Solitaire and Deception Cr	11.26	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17010301PN030_04	Little North Fork CDA River below Skookum Cr	23.85	MILES

Other flow regime alterations

Physical substrate habitat alterations

17010302 South Fork Coeur d Alene

ID17010302PN014_02	Canyon Creek - from and including Gorge Gulch to mouth	8.64	MILES

Physical substrate habitat alterations

17010303 Coeur d Alene Lake

ID17010303PN001_02	Tribs to Coeur d’Alene Lake	49.95	MILES

Physical substrate habitat alterations

ID17010303PN002_02	Cougar Creek - source to mouth	15.7	MILES

Physical substrate habitat alterations

ID17010303PN003_02	Kid Creek - source to mouth	4.08	MILES

Physical substrate habitat alterations

ID17010303PN004_02	Mica Creek - source to mouth	24.18	MILES

Physical substrate habitat alterations

ID17010303PN004_03	Mica Creek - source to mouth	1.29	MILES

Physical substrate habitat alterations

ID17010303PN007_06	Coeur d'Alene River - Latour Creek to mouth	29.41	MILES

Physical substrate habitat alterations

ID17010303PN020_02	Fourth of July Creek - source to mouth	31.87	MILES

Physical substrate habitat alterations

ID17010303PN020_03	Fourth of July Creek - source to mouth	5.12	MILES

Physical substrate habitat alterations

2010: Fourth of July Creek. This AU was assessed on 1/8/2010 by CDA RO Staff (R.Steed, K. Keith) Following the WBAG II protocol/2006 BURP site this AU is not full support. However, this monitoring did not include collection of fish. Another BURP site during the same year showed this AU as full support and fish were collected. The 2000 Coeur d'Alene Lake Tributary SBA determined there was no sediment impairment on this AU. Therefore, DEQ has chosen to delist this AU for the sediment cause and replace it with the Combined Biota/Habitat Alterations cause hoping to invoke further Stressor ID.

ID17010303PN029_03	Wolf Lodge Creek - source to mouth	5.74	MILES

Physical substrate habitat alterations

ID17010303PN031_02	Marie Creek - source to mouth	19.67	MILES

Physical substrate habitat alterations

17010304 St. Joe

ID17010304PN027_02	St. Joe River - North Fork St. Joe River to St. Maries River	159.92	MILES

Physical substrate habitat alterations

Salmon

17060201 Upper Salmon

ID17060201SL007_04	Challis Creek - Darling Creek to mouth	3.42	MILES

Low flow alterations

ID17060201SL009_03	Challis Creek - Bear Creek to Darling Creek	4.94	MILES

Low flow alterations

Other flow regime alterations

High Flow Regime

ID17060201SL009_04	Challis Creek - Bear Creek to Darling Creek	1.5	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17060201SL015_03	Garden Creek - source to mouth	3.92	MILES

Low flow alterations

Physical substrate habitat alterations

ID17060201SL048_03	Basin Creek - East Basin Creek to mouth	2.36	MILES

Physical substrate habitat alterations

ID17060201SL125_02	Road Creek - source to Corral Basin Creek	31.93	MILES

Other flow regime alterations

ID17060201SL131_04	Warm Spring Creek - Hole-in-Rock Creek to mouth	4.66	MILES

Low flow alterations

6/28/2011 (NED) - According to the Upper Salmon Subbasin Assessment and TMDL, approved January 2003, the perennial portion of Warm Springs Creek flows approximately 100 yards it its natural channel before it is diverted in its entirely into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.

ID17060201SL132_02	Warm Spring Creek - source to Hole-in-Rock Creek	104.66	MILES

Low flow alterations

6/28/2011 (NED) - According to the Upper Salmon Subbasin Assessment and TMDL, approved January 2003, the perennial portion of Warm Springs Creek flows approximately 100 yards it its natural channel before it is diverted in its entirely into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.

ID17060201SL132_03	Warm Spring Creek - source to Hole-in-Rock Creek	5.07	MILES

Low flow alterations

6/28/2011 (NED) - According to the Upper Salmon Subbasin Assessment and TMDL, approved January 2003, the perennial portion of Warm Springs Creek flows approximately 100 yards it its natural channel before it is diverted in its entirely into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.

ID17060201SL132_04	Warm Spring Creek - source to Hole-in-Rock Creek	6.71	MILES

Low flow alterations

6/28/2011 (NED) - According to the Upper Salmon Subbasin Assessment and TMDL, approved January 2003, the perennial portion of Warm Springs Creek flows approximately 100 yards it its natural channel before it is diverted in its entirely into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.

ID17060201SL133_02	Broken Wagon Creek - source to mouth	44.79	MILES

Low flow alterations

ID17060201SL133_03	Broken Wagon Creek - source to mouth	3.17	MILES

Low flow alterations

17060202 Pahsimeroi

ID17060202SL006_02	Meadow Creek - source to mouth	28.51	MILES

Low flow alterations

ID17060202SL007_04	Pahsimeroi River - Furley Road (T15S, R22E) to Meadow Creek	1.56	MILES

Low flow alterations

ID17060202SL009_02	Grouse Creek - source to mouth	35.96	MILES

Low flow alterations

ID17060202SL010_04	Pahsimeroi River - Goldburg Creek to Big Creek	6.64	MILES

Low flow alterations

ID17060202SL017_04	Pahsimeroi River - Burnt Creek to Unnamed Tributary (T12N, R	10.34	MILES

Low flow alterations

ID17060202SL031_03	Big Creek - confluence of North and South Fork Big Creeks to	13.56	MILES

Low flow alterations

ID17060202SL034_03	Patterson Creek - Inyo Creek to mouth	14.97	MILES

Other flow regime alterations

ID17060202SL034_04	Patterson Creek - Inyo Creek to mouth	12.05	MILES

Other flow regime alterations

ID17060202SL039_03	Morgan Creek - source to mouth	14.07	MILES

Low flow alterations

17060203 Middle Salmon-Panther

ID17060203SL038_03	Dump Creek - Moose Creek to mouth	5.04	MILES

Physical substrate habitat alterations

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17060204 Lemhi

ID17060204SL026a_02	Mill Creek - diversion (T16N, R24E, Sec. 22) to mouth	10.41	MILES

Low flow alterations

Other flow regime alterations

ID17060204SL027_02	Walter Creek - source to mouth	7.84	MILES

Low flow alterations

ID17060204SL030_05	Lemhi River - confluence of Eighteenmile Creek and Texas Cre	10.39	MILES

Low flow alterations

ID17060204SL036_03	Texas Creek	14.93	MILES

Other flow regime alterations

ID17060204SL041_04	Eighteenmile Creek - Hawley Creek to mouth	2.21	MILES

Low flow alterations

ID17060204SL052a_02	Little Eightmile Creek - diversion (T16N, R25E, Sec. 02) to	0.43	MILES

Low flow alterations

ID17060204SL062a_02	Sandy Creek - diversion (T20N, R24E, Sec. 17) to mouth	2.1	MILES

Low flow alterations

ID17060204SL062b_02	Sandy Creek - source to diversion (T20N, R24E, Sec. 17)	12.33	MILES

Low flow alterations

ID17060204SL064a_02	Bohannon Creek - diversion (T21N, R23E, Sec. 22) to mouth	1.36	MILES

Low flow alterations

ID17060204SL065a_02	Geertson Creek - diversion (T21N, R23E, Sec. 20) to mouth	11.44	MILES

Low flow alterations

ID17060204SL065b_02	Geertson Creek - source to diversion (T21N, R23E, Sec. 20)	14.71	MILES

Low flow alterations

ID17060204SL066a_03	Kirtley Creek - diversion (T21N, R22E, Sec. 02) to mouth	2.28	MILES

Low flow alterations

17060205 Upper Middle Fork Salmon

ID17060205SL026_02	Asher Creek - source to mouth	3.34	MILES

Low flow alterations

ID17060205SL027_02	Unnamed Tributary - source to mouth (T12N, R11E, Sec. 11)	1.62	MILES

Low flow alterations

17060207 Middle Salmon-Chamberlain

ID17060207SL007_02	Warren Creek - 1st and 2nd order tributaries	77.02	MILES

Physical substrate habitat alterations

ID17060207SL007_03	Warren Creek - 3rd order seg. within roadless and wilderness	9.28	MILES

Physical substrate habitat alterations

ID17060207SL007_03a	Warren Creek - 3rd order segment outside roadless area	8.7	MILES

Physical substrate habitat alterations

17060209 Lower Salmon

ID17060209SL060_02	Deep Creek - source to unnamed tributary	28.3	MILES

Other flow regime alterations

Physical substrate habitat alterations

17060210 Little Salmon

ID17060210SL001_05	Little Salmon River - 5th order	24.88	MILES

Physical substrate habitat alterations

ID17060210SL007_05	Little Salmon River - 5th order	17.05	MILES

Physical substrate habitat alterations

The Little Salmon River from Round Valley Creek to the mouth showed support of beneficial uses. However, DEQ was unable to analyze the effect of coarse sediment in the system. Several government agencies including USBR and the BLM have pointed out that coarse sediment transported as part of the 1997 flood is potentially reducing salmonid spawning in places and leading to channel aggradation. DEQ proposes to list the Little Salmon River from Round Valley Creek to the mouth for habitat alteration and delist for sediment. This listing is on the basis of DEQ Beneficial Use Reconnaissance Program (BURP) scores that did not indicate impairment and low suspended sediment data. However, the listing for habitat alteration is in recognition that the system was changed due to the construction of the highway and the channel remains constricted, leading to potential coarse sediment loading problems. The state of Idaho's antidegradation policy applies in this case and existing uses must be maintained and protected from any activities that would result in human caused excess sediment delivery to the system.

Southwest

17050101 C. J. Strike Reservoir

ID17050101SW012_02	Little Canyon Creek - 1st and 2nd order	31.02	MILES

Other flow regime alterations

17050102 Bruneau

ID17050102SW002_05	Jacks Creek - 5th order (Little Jacks Creek to mouth)	12.28	MILES

Low flow alterations

ID17050102SW004_04	Big Jacks Creek - 4th order (Dry Canyon to Duncan Creek)	7.35	MILES

Other flow regime alterations

17050103 Middle Snake-Succor

ID17050103SW001_07	Snake River - Marsing (RM425) to State Line	17.1	MILES

Other flow regime alterations

ID17050103SW002_04	Succor Creek - 4th order	5.51	MILES

Low flow alterations

ID17050103SW003_02	Upper Succor Creek - 1st and 2nd order tributaries	68.41	MILES

Other flow regime alterations

ID17050103SW003_03	Upper Succor Creek - 3rd order (Granite Creek to State Line)	15.7	MILES

Other flow regime alterations

ID17050103SW005_02	Jump Creek - 1st and 2nd order	84.64	MILES

Physical substrate habitat alterations

ID17050103SW005_03	Jump Creek - 3rd order	18.39	MILES

Low flow alterations

ID17050103SW012_04	Sinker Creek - 4th order	16.22	MILES

Other flow regime alterations

ID17050103SW014_04	Castle Creek - lower 4th order (irrigated section)	9.22	MILES

Other flow regime alterations

ID17050103SW014_05	Castle Creek - 5th order (Catherine Cr. to Snake River)	3.82	MILES

Other flow regime alterations

17050104 Upper Owyhee

ID17050104SW028_02	Pole Creek - 1st and 2nd order	71.29	MILES

Other flow regime alterations

ID17050104SW028_03	Pole Creek - 3rd order	6.4	MILES

Other flow regime alterations

ID17050104SW034_02	Red Canyon Creek - 1st and 2nd order	77.67	MILES

Other flow regime alterations

ID17050104SW034_04	Red Canyon Creek - 4th order	2.96	MILES

Other flow regime alterations

17050105 South Fork Owyhee

ID17050105SW001_06	SF Owyhee River - Nevada border to Little Owyhee River	19.62	MILES

Other flow regime alterations

17050107 Middle Owyhee

ID17050107SW004_02	MF Owyhee River & tributaries - 1st and 2nd order	48.03	MILES

Other flow regime alterations

ID17050107SW004_03	Middle Fork Owyhee River - 3rd order section	4.59	MILES

Other flow regime alterations

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ID17050107SW008_04	NF Owyhee River & Juniper Creek - 4th order	2.32	MILES

Low flow alterations

ID17050107SW009_02	Pleasant Valley Cr. & Tribs - 1st & 2nd order	37.73	MILES

Other flow regime alterations

ID17050107SW009_03	Pleasant Valley Creek - 3rd order section	5.68	MILES

Other flow regime alterations

ID17050107SW012_02	Juniper Creek & tributaries - 1st & 2nd order	24.49	MILES

Other flow regime alterations

ID17050107SW012_03	Juniper Creek - 3rd order section	6.87	MILES

Other flow regime alterations

17050108 Jordan

ID17050108SW001_05	Jordan Creek - Williams Creek to State Line	13.35	MILES

Low flow alterations — From the Jordan Creek TMDL: It is recommended that Jordan Creek be added to Section 4c for flow and habitat alteration.

ID17050108SW013_02	Rock Creek above Triangle Reservoir - 1st and 2nd order	64.23	MILES

Other flow regime alterations

ID17050108SW014_02	Louisa Creek - entire drainage	13.81	MILES

Other flow regime alterations

ID17050108SW015_02	Spring and Meadow Creeks - 1st and 2nd order	48.83	MILES

Other flow regime alterations

ID17050108SW015_03	Spring and Meadow Creeks - 3rd order sections	8.34	MILES

Other flow regime alterations

ID17050108SW021_02	Cow Creek - 1st and 2nd order	55.12	MILES

Other flow regime alterations

ID17050108SW021_03	Cow Creek - 3rd order (Wildcat Canyon to Soda Creek)	3.42	MILES

Other flow regime alterations

17050112 Boise-Mores

ID17050112SW009_02	Mores Creek - 1st and 2nd order	133.17	MILES

Physical substrate habitat alterations

ID17050112SW009_03	Mores Creek - 3rd order (Hayfork Creek to Elk Creek)	12.29	MILES

Physical substrate habitat alterations

ID17050112SW009_04	Mores Creek - 4th order (Elk Creek to Grimes Creek)	8.84	MILES

Physical substrate habitat alterations — 5/25/2010 (NED) - During the development of the Boise-Mores Creek Subbasin Assessment and TMDL, it was determined that habitat and flow alteration is due to impacts of extensive historic placer mining that took place in the basin.

ID17050112SW013_03	Grimes, Clear and Smith Creeks - 3rd order sections	8.57	MILES

Physical substrate habitat alterations

ID17050112SW013_04	Grimes Creek - 4th order (Clear Creek to Granite Creek)	9.53	MILES

Physical substrate habitat alterations

ID17050112SW013_05	Grimes Creek - 5th order (Granite Creek to mouth)	14.65	MILES

Physical substrate habitat alterations

17050113 South Fork Boise

ID17050113SW007L_0L	Little Camas Reservoir	966.18	ACRES

Low flow alterations

ID17050113SW032_03	Smith Creek - 3rd order (Mule Gulch to SF Boise River)	16.45	MILES

Low flow alterations

17050114 Lower Boise

ID17050114SW001_06	Boise River - Indian Creek to mouth	45.43	MILES

Low flow alterations	The lower Boise River from Diversion Dam to the mouth is NOT listed for flow or habitat alteration despite listing of the reach immediately above for flow alteration. The lower Boise River is a highly regulated stream with three upstream reservoirs that are jointly operated to meet irrigation, flood control and other uses. Flow and habitat assessments have been done on the lower Boise River by Idaho Fish and Game, Asbridge and Bjornn (1988), and USGS (1997). These studies, in addition to chemical, physical and biological data collected by USGS for the Lower Boise Watershed Advisory Group and contained in the Lower Boise River TMDL (IDEQ, 2000) find that flow alteration and habitat contribute to impairment of use in ALL reaches of the Boise River below Lucky Peak Dam. The LBR TMDL finds that: "Sediment, temperature, flow, and habitat conditions contribute to the impairment of the cold water biota." (p.1, Executive Summary, LBR TMDL, IDEQ, 2000); "In addition, flow and habitat conditions impair aquatic life uses in the Boise River." (p 31, LBR TMDL, IDEQ 2000); "Sediment, temperature, and flow and habitat conditions in the river all contribute to impairment of cold water biota and salmonid spawning." (p. 47, LBR TMDL, IDEQ 2000); "Table 10: Status of Aquatic Life Uses in Lower Boise River Reach Other Causes of Impairment Boise River: Lucky Peak to Barber□Flow Alteration, habitat modification (lack of cover, lack of gravels, channelization, embeddedness, and armored substrate) Boise River: Barber to Star Same as above Boise River: Star to Notus Same as above Boise River: Notus to Mouth Same as above (p. 47, LBR TMDL, IDEQ 2000); "Many of man's activities in the lower Boise River watershed contribute to degradation of flow and habitat conditions. Flow manipulation for flood control, irrigation, impoundments, flood control activities such as clearing debris and construction of levees, gravel mining, unscreened diversions, angling pressure and barriers in the river all have adverse affects on habitat. It is DEQ's position that habitat modification and flow alteration, which may adversely affect beneficial uses, are not pollutants under Section 303(d) of the Clean Water Act. There are no water quality standards for habitat or flow, nor are they suitable for estimation of load capacity or load allocations. Because of these practical limitations, TMDLs will not be developed to address habitat modification or flow alteration." (p.48, LBR TMDL, IDEQ, 2000). The City recommends that IDEQ list the Boise River from Diversion Dam to the Mouth for flow alteration and habitat in Section 4c based on the Tier 1 data and multiple lines of evidence described above.
Physical substrate habitat alterations	

ID17050114SW005_06	Boise River -River Mile 50 to Star Bridge	38.17	MILES

Low flow alterations

The lower Boise River from Diversion Dam to the mouth is NOT listed for flow or habitat alteration despite listing of the reach immediately above for flow alteration. The lower Boise River is a highly regulated stream with three upstream reservoirs that are jointly operated to meet irrigation, flood control and other uses.
Flow and habitat assessments have been done on the lower Boise River by Idaho Fish and Game, Asbridge and Bjornn (1988), and USGS (1997). These studies, in addition to chemical, physical and biological data collected by USGS for the Lower Boise Watershed Advisory Group and contained in the Lower Boise River TMDL (IDEQ, 2000) find that flow alteration and habitat contribute to impairment of use in ALL reaches of the Boise River below Lucky Peak Dam. The LBR TMDL finds that:

"Sediment, temperature, flow, and habitat conditions contribute to the impairment of the cold water biota." (p.1, Executive Summary, LBR TMDL, IDEQ, 2000); "In addition, flow and habitat conditions impair aquatic life uses in the Boise River." (p 31, LBR TMDL, IDEQ 2000);
"Sediment, temperature, and flow and habitat conditions in the river all contribute to impairment of cold water biota and salmonid spawning." (p. 47, LBR TMDL, IDEQ 2000);

"Table 10: Status of Aquatic Life Uses in Lower Boise River Reach Other Causes of Impairment Boise River: Lucky Peak to Barber□Flow Alteration, habitat modification (lack of cover, lack of gravels, channelization, embeddedness, and armored substrate)
Boise River: Barber to Star Same as above
Boise River: Star to Notus Same as above
Boise River: Notus to Mouth Same as above
(p. 47, LBR TMDL, IDEQ 2000);
"Many of man's activities in the lower Boise River watershed contribute to degradation of flow and habitat conditions. Flow manipulation for flood control, irrigation, impoundments, flood control activities such as clearing debris and construction of levees, gravel mining, unscreened diversions, angling pressure and barriers in the river all have adverse affects on habitat. It is DEQ's position that habitat modification and flow alteration, which may adversely affect beneficial uses, are not pollutants under Section 303(d) of the Clean Water Act. There are no water quality standards for habitat or flow, nor are they suitable for estimation of load capacity or load allocations. Because of these practical limitations, TMDLs will not be developed to address habitat modification or flow alteration." (p.48, LBR TMDL, IDEQ, 2000).

The City recommends that IDEQ list the Boise River from Diversion Dam to the Mouth for flow alteration and habitat in Section 4c based on the Tier 1 data and multiple lines of evidence described above.

Physical substrate habitat alterations

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ID17050114SW005_06a Boise River-Star to Middleton	11.3	MILES

Low flow alterations

The lower Boise River from Diversion Dam to the mouth is NOT listed for flow or habitat alteration despite listing of the reach immediately above for flow alteration. The lower Boise River is a highly regulated stream with three upstream reservoirs that are jointly operated to meet irrigation, flood control and other uses.
Flow and habitat assessments have been done on the lower Boise River by Idaho Fish and Game, Asbridge and Bjornn (1988), and USGS (1997). These studies, in addition to chemical, physical and biological data collected by USGS for the Lower Boise Watershed Advisory Group and contained in the Lower Boise River TMDL (IDEQ, 2000) find that flow alteration and habitat contribute to impairment of use in ALL reaches of the Boise River below Lucky Peak Dam. The LBR TMDL finds that:

"Sediment, temperature, flow, and habitat conditions contribute to the impairment of the cold water biota." (p.1, Executive Summary, LBR TMDL, IDEQ, 2000); "In addition, flow and habitat conditions impair aquatic life uses in the Boise River." (p 31, LBR TMDL, IDEQ 2000);
"Sediment, temperature, and flow and habitat conditions in the river all contribute to impairment of cold water biota and salmonid spawning." (p. 47, LBR TMDL, IDEQ 2000);

"Table 10: Status of Aquatic Life Uses in Lower Boise River Reach Other Causes of Impairment Boise River: Lucky Peak to Barber Flow Alteration, habitat modification (lack of cover, lack of gravels, channelization, embeddedness, and armored substrate)
Boise River: Barber to Star Same as above
Boise River: Star to Notus Same as above
Boise River: Notus to Mouth Same as above
(p. 47, LBR TMDL, IDEQ 2000);
"Many of man's activities in the lower Boise River watershed contribute to degradation of flow and habitat conditions. Flow manipulation for flood control, irrigation, impoundments, flood control activities such as clearing debris and construction of levees, gravel mining, unscreened diversions, angling pressure and barriers in the river all have adverse affects on habitat. It is DEQ's position that habitat modification and flow alteration, which may adversely affect beneficial uses, are not pollutants under Section 303(d) of the Clean Water Act. There are no water quality standards for habitat or flow, nor are they suitable for estimation of load capacity or load allocations. Because of these practical limitations, TMDLs will not be developed to address habitat modification or flow alteration." (p.48, LBR TMDL, IDEQ, 2000).

The City recommends that IDEQ list the Boise River from Diversion Dam to the Mouth for flow alteration and habitat in Section 4c based on the Tier 1 data and multiple lines of evidence described above.

Physical substrate habitat alterations

ID17050114SW005_06b	Boise River-Middleton to Indian Creek	7.84	MILES

Low flow alterations

The lower Boise River from Diversion Dam to the mouth is NOT listed for flow or habitat alteration despite listing of the reach immediately above for flow alteration. The lower Boise River is a highly regulated stream with three upstream reservoirs that are jointly operated to meet irrigation, flood control and other uses.
Flow and habitat assessments have been done on the lower Boise River by Idaho Fish and Game, Asbridge and Bjornn (1988), and USGS (1997). These studies, in addition to chemical, physical and biological data collected by USGS for the Lower Boise Watershed Advisory Group and contained in the Lower Boise River TMDL (IDEQ, 2000) find that flow alteration and habitat contribute to impairment of use in ALL reaches of the Boise River below Lucky Peak Dam. The LBR TMDL finds that:

"Sediment, temperature, flow, and habitat conditions contribute to the impairment of the cold water biota." (p.1, Executive Summary, LBR TMDL, IDEQ, 2000); "In addition, flow and habitat conditions impair aquatic life uses in the Boise River." (p 31, LBR TMDL, IDEQ 2000);
"Sediment, temperature, and flow and habitat conditions in the river all contribute to impairment of cold water biota and salmonid spawning." (p. 47, LBR TMDL, IDEQ 2000);

"Table 10: Status of Aquatic Life Uses in Lower Boise River Reach Other Causes of Impairment Boise River: Lucky Peak to Barber Flow Alteration, habitat modification (lack of cover, lack of gravels, channelization, embeddedness, and armored substrate)
Boise River: Barber to Star Same as above
Boise River: Star to Notus Same as above
Boise River: Notus to Mouth Same as above
(p. 47, LBR TMDL, IDEQ 2000);
"Many of man's activities in the lower Boise River watershed contribute to degradation of flow and habitat conditions. Flow manipulation for flood control, irrigation, impoundments, flood control activities such as clearing debris and construction of levees, gravel mining, unscreened diversions, angling pressure and barriers in the river all have adverse affects on habitat. It is DEQ's position that habitat modification and flow alteration, which may adversely affect beneficial uses, are not pollutants under Section 303(d) of the Clean Water Act. There are no water quality standards for habitat or flow, nor are they suitable for estimation of load capacity or load allocations. Because of these practical limitations, TMDLs will not be developed to address habitat modification or flow alteration." (p.48, LBR TMDL, IDEQ, 2000).

The City recommends that IDEQ list the Boise River from Diversion Dam to the Mouth for flow alteration and habitat in Section 4c based on the Tier 1 data and multiple lines of evidence described above.

Physical substrate habitat alterations

ID17050114SW010_02	Fivemile Creek - 1st and 2nd order	65	MILES

Low flow alterations

ID17050114SW011a_06 Boise River - Diversion Dam to River Mile 50	22.54	MILES

Low flow alterations

The lower Boise River from Diversion Dam to the mouth is NOT listed for flow or habitat alteration despite listing of the reach immediately above for flow alteration. The lower Boise River is a highly regulated stream with three upstream reservoirs that are jointly operated to meet irrigation, flood control and other uses.
Flow and habitat assessments have been done on the lower Boise River by Idaho Fish and Game, Asbridge and Bjornn (1988), and USGS (1997). These studies, in addition to chemical, physical and biological data collected by USGS for the Lower Boise Watershed Advisory Group and contained in the Lower Boise River TMDL (IDEQ, 2000) find that flow alteration and habitat contribute to impairment of use in ALL reaches of the Boise River below Lucky Peak Dam. The LBR TMDL finds that:

"Sediment, temperature, flow, and habitat conditions contribute to the impairment of the cold water biota." (p.1, Executive Summary, LBR TMDL, IDEQ, 2000); "In addition, flow and habitat conditions impair aquatic life uses in the Boise River." (p 31, LBR TMDL, IDEQ 2000);
"Sediment, temperature, and flow and habitat conditions in the river all contribute to impairment of cold water biota and salmonid spawning." (p. 47, LBR TMDL, IDEQ 2000);

"Table 10: Status of Aquatic Life Uses in Lower Boise River Reach Other Causes of Impairment Boise River: Lucky Peak to Barber□Flow Alteration, habitat modification (lack of cover, lack of gravels, channelization, embeddedness, and armored substrate)
Boise River: Barber to Star Same as above
Boise River: Star to Notus Same as above
Boise River: Notus to Mouth Same as above
(p. 47, LBR TMDL, IDEQ 2000);
"Many of man's activities in the lower Boise River watershed contribute to degradation of flow and habitat conditions. Flow manipulation for flood control, irrigation, impoundments, flood control activities such as clearing debris and construction of levees, gravel mining, unscreened diversions, angling pressure and barriers in the river all have adverse affects on habitat. It is DEQ's position that habitat modification and flow alteration, which may adversely affect beneficial uses, are not pollutants under Section 303(d) of the Clean Water Act. There are no water quality standards for habitat or flow, nor are they suitable for estimation of load capacity or load allocations. Because of these practical limitations, TMDLs will not be developed to address habitat modification or flow alteration." (p.48, LBR TMDL, IDEQ, 2000).

The City recommends that IDEQ list the Boise River from Diversion Dam to the Mouth for flow alteration and habitat in Section 4c based on the Tier 1 data and multiple lines of evidence described above.

Physical substrate habitat alterations

ID17050114SW011b_06 Boise River - Lucky Peak Dam to Diversion Dam	2.31	MILES

Low flow alterations

17050123 North Fork Payette

ID17050123SW001_06a	North Fork Payette River - Smiths Ferry to Banks	19.13	MILES

Other flow regime alterations

From 2005 TMDL, page 57:

The North Fork Payette River is a hydrologically modified system with flow largely
influenced by outflow from Cascade Dam and in the lower reach, inflow from the South Fork
Payette River. Peak flow usually occurs in late May and June from both snowmelt runoff
and release of water from Lake Cascade after the reservoir fills (Figures 21 and 22). The
average annual runoff at Horseshoe Bend is about 2.35 million acre-feet of water per year.
Base flow is usually in November. If the system were not hydrologically modified, base
flows would probably occur in August. Prior to the reservoir filling, releases in winter and
spring are generally around 200 cubic feet per second (cfs). The BOR informally operates
Cascade and Deadwood to try and keep maximum flows below 12,000 cfs at the Horseshoe
Bend gauge. During the summer months, flows are generally kept at between 2,100-2,600
cfs at the Horseshoe Bend gauge in order to meet the needs of downstream irrigators. Dam
releases are from Cascade and Deadwood Reservoirs.

ID17050123SW011_03	Boulder Creek - 3rd order (Louie Creek to mouth)	11.55	MILES

Other flow regime alterations

17050201 Brownlee Reservoir

ID17050201SW007_03	Warm Springs Creek - 3rd order	5.31	MILES

Low flow alterations

Upper Snake

17040104 Palisades

ID17040104SK001_06	Snake River - Black Canyon Creek to river mile 856 (T03N, R4	27.91	MILES

Other flow regime alterations

ID17040104SK002_03	Antelope Creek - source to mouth	6.03	MILES

Low flow alterations

ID17040104SK003_06	Snake River - Fall Creek to Black Canyon Creek	32.96	MILES

Other flow regime alterations

ID17040104SK008_06	Snake River - Palisades Reservoir Dam to Fall Creek	22.1	MILES

Other flow regime alterations

ID17040104SK026_02	Little Elk Creek - source to Palisades Reservoir	10	MILES

Low flow alterations

17040105 Salt

ID17040105SK001_02b	Newswander Canyon	4.96	MILES

Physical substrate habitat alterations

ID17040105SK002_02c	Cabin Creek	3.01	MILES

Physical substrate habitat alterations

ID17040105SK003_02j	Haderlie Creek	8.65	MILES

Physical substrate habitat alterations

ID17040105SK006_02f	White Canyon	3.2	MILES

Physical substrate habitat alterations

ID17040105SK007_02c	Smoky Creek	10.75	MILES

Physical substrate habitat alterations

ID17040105SK007_02f	Draney Creek	6.85	MILES

Physical substrate habitat alterations

ID17040105SK007_03	Tygee Creek - source to mouth	5.98	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040105SK008_02c	Beaver Dam Creek	5.09	MILES

Physical substrate habitat alterations

ID17040105SK010_02a	South Fork Deer Creek	11.69	MILES

Physical substrate habitat alterations

17040201 Idaho Falls

ID17040201SK013_06	Snake River - river mile 856 (T03N, R41E, Sec. 16) to Dry Be	7.24	MILES

Other flow regime alterations

17040204 Teton

ID17040204SK002_05	North Fork Teton River - Teton River Forks to Henrys Fork	17	MILES

Low flow alterations

ID17040204SK014_04	Teton River - Felt Dam outlet to Milk Creek	1.66	MILES

Physical substrate habitat alterations

ID17040204SK015_04	Teton River - Felt Dam pool	4.12	MILES

Physical substrate habitat alterations

ID17040204SK016_04	Teton River - Highway 33 bridge to Felt Dam pool	3.26	MILES

Physical substrate habitat alterations

ID17040204SK017_04	Teton River - Cache Bridge (NW ¼, NE ¼, Sec. 1, T5N, R44E) t	13.92	MILES

Physical substrate habitat alterations

ID17040204SK019_02	Packsaddle Creek - source to diversion (NE ¼ Sec. 8, T5N, R4	14.79	MILES

Other flow regime alterations

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ID17040204SK020_04	Teton River - Teton Creek to Cache Bridge (NW ¼, NE ¼, Sec.	13.71	MILES

Physical substrate habitat alterations

ID17040204SK021_03	Horseshoe Creek - pipeline diversion (SE ¼, NW ¼, Sec. 27, T	4.81	MILES

Low flow alterations

ID17040204SK025_02	Mahogany Creek - source to pipeline diversion (NE ¼, Sec. 27	7.01	MILES

Other flow regime alterations

ID17040204SK026_02	Teton River - Trail Creek to Teton Creek	22.31	MILES

Other flow regime alterations

ID17040204SK026_04	Teton River - Trail Creek to Teton Creek	6.45	MILES

Physical substrate habitat alterations

ID17040204SK028_03	Teton River - confluence of Warm Creek and Drake Creek to Tr	2.6	MILES

Physical substrate habitat alterations

ID17040204SK032_02	Drake Creek - source to mouth	5.43	MILES

Physical substrate habitat alterations

ID17040204SK041_02	Fox Creek - North Fox Creek Canal (NW ¼, Sec 29 T4N, R46E) t	7.99	MILES

Other flow regime alterations

ID17040204SK042_02	Fox Creek - Idaho/Wyoming border to North Fox Creek Canal (N	0.91	MILES

Other flow regime alterations

ID17040204SK056_02	Spring Creek - source to North Leigh Creek, including spring	24.2	MILES

Other flow regime alterations

17040205 Willow

ID17040205SK006_02	Birch Creek - source to mouth	14.11	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040205SK006_03	Birch Creek - source to mouth	1.01	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040205SK015_02	Long Valley Creek - source to mouth	22.6	MILES

Low flow alterations

17040206 American Falls

ID17040206SK002_03	Bannock Creek - source to American Falls Reservoir	14.3	MILES

Low flow alterations

ID17040206SK010_04	Rattlesnake Creek - lower	5.37	MILES

Low flow alterations

ID17040206SK024_02a	McTucker Creek	1.75	MILES

Physical substrate habitat alterations

17040207 Blackfoot

ID17040207SK002_02b	Deadman Creek	5.16	MILES

Physical substrate habitat alterations

ID17040207SK002_05	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main	65.53	MILES

Other flow regime alterations

ID17040207SK005_02a	Grave Creek	3.96	MILES

Physical substrate habitat alterations

ID17040207SK005_02d	Coyote Creek	1.23	MILES

Physical substrate habitat alterations

ID17040207SK005_03	Grave Creek - West Creek to Blackfoot River	5.48	MILES

Physical substrate habitat alterations

ID17040207SK006_02a	Chicken Creek - headwaters to Corral Creek	6.59	MILES

Physical substrate habitat alterations

ID17040207SK006_02b	Bear Creek - headwaters to Corral Creek	3.84	MILES

Physical substrate habitat alterations

ID17040207SK006_03	Corral Creek - middle	9.22	MILES

Physical substrate habitat alterations

ID17040207SK007_02a	Sawmill Creek - headwaters to Grizzly Creek	7.44	MILES

Physical substrate habitat alterations

ID17040207SK007_03	Grizzly Creek - source to mouth	4.54	MILES

Physical substrate habitat alterations

ID17040207SK008_02	Thompson Creek - upper	10.71	MILES

Physical substrate habitat alterations

ID17040207SK009_02a	Collett Creek - headwaters to Blackfoot Reservoir	3.98	MILES

Physical substrate habitat alterations

ID17040207SK009_03	Little Blackfoot River	7.67	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040207SK010_02a	State Land Creek - headwaters to Blackfoot River	9.07	MILES

Physical substrate habitat alterations

ID17040207SK011_03	Trail Creek - source to mouth (Below Findlayson Ranch)	5.54	MILES

Low flow alterations

ID17040207SK012_02b	Goodheart Creek	7.54	MILES

Physical substrate habitat alterations

ID17040207SK012_03	Slug Creek - source to mouth (2nd order to 3rd order)	4.79	MILES

Physical substrate habitat alterations

ID17040207SK012_04	Slug Creek - source to mouth	18.15	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040207SK013_02a	Dry Valley Creek	6.43	MILES

Physical substrate habitat alterations

ID17040207SK015_02a	upper Mill Canyon	2.44	MILES

Physical substrate habitat alterations

ID17040207SK018_02e	Lanes Creek - FS boundary to Lander Creek	3.12	MILES

Physical substrate habitat alterations

ID17040207SK018_03	Lanes Creek - Lander Creek to Chippy Creek	3.65	MILES

Physical substrate habitat alterations

ID17040207SK018_04	Lanes Creek - Chippy Creek to Blackfoot River	9.41	MILES

Physical substrate habitat alterations

ID17040207SK019_02b	Bacon Creek - below FS boundary	3.5	MILES

Physical substrate habitat alterations

ID17040207SK019_03	Bacon Creek - below FS boundary	2.05	MILES

Physical substrate habitat alterations

ID17040207SK019_04	Bacon Creek - below FS boundary	4.62	MILES

Physical substrate habitat alterations

ID17040207SK021_03	lower Chippy Creek	4.61	MILES

Physical substrate habitat alterations

ID17040207SK022_03	lower Sheep Creek	1.32	MILES

Physical substrate habitat alterations

ID17040207SK023_02a	Rasmussen Creek	6.26	MILES

Physical substrate habitat alterations

ID17040207SK023_02b	upper Angus Creek - headwaters to Rasumussen Creek	7.78	MILES

Physical substrate habitat alterations

ID17040207SK023_04	Lower Angus Creek - Rasmussen Creek to Blackfoot River	3.46	MILES

Physical substrate habitat alterations

ID17040207SK025_02c	Clarks Cut - Sheep Creek to HUC boundary	1.47	MILES

Physical substrate habitat alterations

ID17040207SK025_03b	Crooked Creek	2.13	MILES

Physical substrate habitat alterations

ID17040207SK030_03	Wolverine Creek - Jones Cr to Mouth	2.54	MILES

Low flow alterations

Physical substrate habitat alterations

17040208 Portneuf

ID17040208SK001_05	Portneuf River - Marsh Creek to American Falls Reservoir	28.79	MILES

Physical substrate habitat alterations

ID17040208SK006_03a	Marsh Creek - Rt Fk to Red Rock Pass	3.79	MILES

Physical substrate habitat alterations

ID17040208SK006_04	Lower Marsh Creek	17.68	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040208SK006_04a	lower middle Marsh Creek	19.77	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040208SK010_02b	lower Garden Creek	7.65	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040208SK014_02	Cherry Creek - ephemeral tributaries	17.62	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040208SK014_02b	Cherry Creek	5.85	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040208SK016_02	Portneuf R - 2nd order tribs-Chesterfield Dam to Marsh Creek	155.67	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040208SK016_03	Portneuf River - Chesterfield Reservoir Dam to Marsh Creek	5.52	MILES

Low flow alterations

ID17040208SK016_04	Portneuf River - Chesterfield Reservoir Dam to Marsh Creek	2.82	MILES

Low flow alterations

ID17040208SK016_05	Portneuf River - 5th Order	52.79	MILES

Low flow alterations

ID17040208SK017_02c	Beaverdam Creek	3.84	MILES

Physical substrate habitat alterations

ID17040208SK018_02a	Twentyfour Mile Creek - Twentyfour Mile Reservoir to Pole Ca	1.18	MILES

Low flow alterations

Physical substrate habitat alterations

17040210 Raft

ID17040210SK001_05	Raft River - Heglar Canyon Creek to mouth	12.42	MILES

Low flow alterations

ID17040210SK002_02	Raft River - Cassia Creek to Heglar Canyon Creek	167.19	MILES

Other flow regime alterations

ID17040210SK002_05	Raft River - Cassia Creek to Heglar Canyon Creek	21.42	MILES

Other flow regime alterations

ID17040210SK003_04	Cassia Creek - Conner Creek to mouth	12.77	MILES

Physical substrate habitat alterations

ID17040210SK007_05	Cassia Creek - source to Clyde Creek	4.82	MILES

Other flow regime alterations

ID17040210SK008_04	Raft River - Cottonwood Creek to Cassia Creek	22.91	MILES

Other flow regime alterations

ID17040210SK010_04	Raft River - Unnamed Tributary (T15S, R26E, Sec. 24) to Cott	19.1	MILES

Low flow alterations

ID17040210SK013_04	Raft River - Idaho/Utah border to Edwards Creek	8.97	MILES

Other flow regime alterations

ID17040210SK019_02	Sublett Creek - Sublett Reservoir Dam to mouth	51.44	MILES

Other flow regime alterations

ID17040210SK020_0L	Sublett Reservoir	79.07	ACRES

Low flow alterations

17040211 Goose

ID17040211SK000_02A	Little Cottonwood Creek	63.19	MILES

Low flow alterations

ID17040211SK002L_0L	Lower Goose Creek Reservoir	1005.71	ACRES

Other flow regime alterations

ID17040211SK003_04	Trapper Creek - from and including Squaw Cr. to reservoir.	7.3	MILES

Other flow regime alterations

ID17040211SK003_04a	Trapper Creek	0.34	MILES

Physical substrate habitat alterations

17040212 Upper Snake-Rock

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ID17040212SK000_02	Unclassified Waters in CU 17040212	392.31	MILES
Other flow regime alterations			
ID17040212SK001_07	Snake River - Lower Salmon Falls to Clover Creek	26.62	MILES
Other flow regime alterations	Not a pollutant but rather pollution.		
ID17040212SK005_07	Snake River - Box Canyon Creek to Lower Salmon Falls	16.51	MILES
Other flow regime alterations			
ID17040212SK007_02	Snake River - Rock Creek to Box Canyon Creek	15.68	MILES
Other flow regime alterations			
ID17040212SK007_07	Snake River - Rock Creek to Box Canyon Creek	18.3	MILES
Other flow regime alterations			
ID17040212SK010_03	Mud Creek - Deep Creek Road (T09S, R14E) to mouth	1.07	MILES
Low flow alterations			
ID17040212SK012_03	Cedar Draw - source to mouth	2.93	MILES
Low flow alterations			
ID17040212SK013_04	Rock Creek -river mile 25 (T11S, R18E, Sec. 36) to mouth	4.63	MILES
Other flow regime alterations			
ID17040212SK013_05	Rock Creek -river mile 25 (T11S, R18E, Sec. 36) to mouth	20.11	MILES
Other flow regime alterations			
ID17040212SK014_02	Cottonwood Creek - source to mouth	37.64	MILES
Low flow alterations			
ID17040212SK014_04	Cottonwood Creek - source to mouth	6.9	MILES
Other flow regime alterations			
ID17040212SK015_03	McMullen Creek - source to mouth	9.41	MILES
Other flow regime alterations			
ID17040212SK016_04	Rock Creek - Fifth Fork Rock Creek to river mile 25 (T11S, R	8.31	MILES
Other flow regime alterations			
ID17040212SK019_07	Snake River - Twin Falls to Rock Creek	11.87	MILES
Other flow regime alterations			
ID17040212SK020_07	Snake River - Milner Dam to Twin Falls	21.29	MILES
Other flow regime alterations			
ID17040212SK022_03	Dry Creek - source to mouth	9.85	MILES
Other flow regime alterations			
ID17040212SK023_02	West Fork Dry Creek - source to mouth	10.72	MILES
Other flow regime alterations			

ID17040212SK031_02	Thousand Springs	4.6	MILES

Other flow regime alterations

ID17040212SK033_02	Billingsley Creek - source to mouth	8.13	MILES

Other flow regime alterations

ID17040212SK034_04	Clover Creek - Pioneer Reservoir Dam outlet to Snake River	9.96	MILES

Low flow alterations

ID17040212SK035_04	Pioneer Reservoir	229.81	ACRES

Other flow regime alterations

ID17040212SK040_03	Calf Creek - source to mouth	6.56	MILES

Low flow alterations

17040213 Salmon Falls

ID17040213SK000_04	Cedar Creek-reservoir to Salmon Falls Creek.	19.54	MILES

Other flow regime alterations

17040214 Beaver-Camas

ID17040214SK002_05	Camas Creek - Spring Creek to Beaver Creek	41.33	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17040214SK003_05	Beaver Creek - canal (T09N, R36E) to mouth	10.56	MILES

Other flow regime alterations

Physical substrate habitat alterations

ID17040214SK015_05	Beaver Creek - Rattlesnake Creek to Dry Creek	2.9	MILES

Other flow regime alterations

Physical substrate habitat alterations

17040215 Medicine Lodge

ID17040215SK012_03	Irving Creek - source to mouth	2.56	MILES

Physical substrate habitat alterations

17040216 Birch

ID17040216SK001_04	Birch Creek - Reno Ditch to playas	24.7	MILES

Other flow regime alterations — 12/29/2009 - The Birch Creek Subbasin Assessment indicates that this segment is permanently de-watered for hydroelectric power generation by a diversion structure at the Reno Ditch.

17040217 Little Lost

ID17040217SK022_03	Wet Creek - Squaw Creek to mouth	8.36	MILES

Other flow regime alterations

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17040218 Big Lost

ID17040218SK002_06	Big Lost River - Spring Creek to Big Lost River Sinks (playa	72.2	MILES

Other flow regime alterations

ID17040218SK003_06	Spring Creek - Lower Pass Creek to Big Lost River	17.12	MILES

Low flow alterations

Physical substrate habitat alterations

ID17040218SK024_05	Big Lost River - Burnt Creek to Thousand Springs Creek	21.44	MILES

Low flow alterations

ID17040218SK046_02	Antelope Creek - Spring Creek to mouth	49.58	MILES

Other flow regime alterations

ID17040218SK047_04	Antelope Creek - Dry Fork Creek to Spring Creek	3.56	MILES

Other flow regime alterations

17040219 Big Wood

ID17040219SK004_05	Big Wood River - Seamans Creek to Magic Reservoir	39.46	MILES

Other flow regime alterations

ID17040219SK007_05	Big Wood River - North Fork Big Wood River to Seamans Creek	28.95	MILES

Other flow regime alterations

ID17040219SK008_02A	Quigley Creek	9.72	MILES

Low flow alterations

ID17040219SK027_03	Croy Creek - source to mouth	8.36	MILES

Low flow alterations

ID17040219SK030_03	Black Canyon Creek - source to mouth	28.05	MILES

Low flow alterations

17040220 Camas

ID17040220SK011_02	Soldier Creek - Wardrop Creek to mouth	15.21	MILES

Other flow regime alterations — Droughts, flow diversions, aquifer level fluctuations, and channel straightening all contribute to the intermittent status of the lower segments of the creek. See pg 60 Camas Creek Subbasin Assessment

ID17040220SK023L_0L	Mormon Reservoir	1583.94	ACRES

Other flow regime alterations — Flow alterations are not a pollutant but rather pollution. Mormon Reservoir will remain listed as impaired by flow alteration as noted on pg 157 Camas Creek Subbasin Assessment.

ID17040220SK025_02	McKinney Creek - source to Mormon Reservoir	17.48	MILES

Low flow alterations

17040221 Little Wood

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ID17040221SK003_05	Little Wood River - West Canal (north) to West Canal (south)	14.52	MILES
Low flow alterations			
ID17040221SK006_03	Fish Creek - Fish Creek Reservoir Dam to mouth	2.67	MILES
Other flow regime alterations			
ID17040221SK006_04	Fish Creek - Fish Creek Reservoir Dam to mouth	16.6	MILES
Other flow regime alterations			
ID17040221SK007L_0L	Fish Creek Reservoir	349.65	ACRES
Other flow regime alterations			
ID17040221SK008_04	Fish Creek - source to Fish Creek Reservoir	1.36	MILES
Other flow regime alterations			
ID17040221SK009_03	West Fork Fish Creek - source to Fish Creek Reservoir (dry).	3.33	MILES
Other flow regime alterations			
ID17040221SK010_05	Little Wood River - Little Wood River Reservoir Dam to Carey	4.05	MILES
Other flow regime alterations	Flow may not be sufficent to support beneficial uses, however beneficial uses support status is unknow at this time. pg 113 Little Wood River Subbasin Assessment.		
ID17040221SK012L_0L	Little Wood River Reservoir	600.46	ACRES
Other flow regime alterations	As a result of the subbasin assessment , the Little Wood River Reservoir will remain listed as impaired by flow alteration. See page 132		
ID17040221SK022_02	Dry Creek - source to mouth	39.65	MILES
Other flow regime alterations	As a result of the subbasin assessment Dry Creek will remain listed as impacted by flow alteration. See pg 76 of the Little Wood River Subbasin Assessment		
ID17040221SK022_03	Dry Creek - source to mouth	11.61	MILES
Other flow regime alterations	As a result of the subbasin assessment Dry Creek will remain listed as impacted by flow alteration. See pg 76 Little Wood River Subbasin Assessment		

Appendix J. Category 5 (§303(d) List)—Waters of the State for Which a TMDL Is Needed

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2010 Integrated Report: Category 5: Impaired Waters Needing a TMDL

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Bear River

16010102 Central Bear

ID16010102BR001_05	Bear River - Idaho/Wyoming border to railroad bridge (T14N,	30.87	MILES

Sedimentation/Siltation

ID16010102BR002_03	Pegram Creek - source to mouth	6.27	MILES

Sedimentation/Siltation

ID16010102BR005_02	Dry Creek - Dip Creek to Thomas Fk.	8.23	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment

ID16010102BR005_02a	Dry Creek (including Dip Creek) to USFS boundary	8.63	MILES

Sedimentation/Siltation — Despite passing BURP in 2006, DEQ 2008 streambank inventory data show streamabanks do not meet 80% stability target. 2008 depth fine data show substrate >28% fine material.

ID16010102BR006_02	Preuss Creek - USFS boundary to Geneva ditch	6.07	MILES

Sedimentation/Siltation

ID16010102BR006_02a	Beaver Creek - headwaters to Preuss Creek	7.52	MILES

Combined Biota/Habitat Bioassessments

ID16010102BR006_02b	Preuss Creek (includes Fish Cr) headwaters to USFS boundar	11.99	MILES

Sedimentation/Siltation — Despite passing BURP in 2006, DEQ streambank inventory data show streamabanks do not meet 80% stability target.

ID16010102BR008_02	Sheep Creek - source to mouth	22.65	MILES

Sedimentation/Siltation

16010201 Bear Lake

ID16010201BR002_02	Bennington Canyon and unnamed tributaries	176.26	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment

ID16010201BR002_02d	Dunn's Creek	10.49	MILES

Cause Unknown

ID16010201BR002_05	Bear River -railroad bridge (T14N, R45E, Sec. 21) to Ovid Cr	54.43	MILES

Temperature, water — Exceeded State WQS for SS and CWAL. See temperature data in IDASA.

ID16010201BR002_06	Bear River - Ovid Cr confluence to Alexander Reservoir	44.35	MILES

Temperature, water — Exceeded State WQS for SS and CWAL. See temperature data in IDASA.

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ID16010201BR006_02d	Stauffer Creek - Beaver Cr to Spring Cr	5.24	MILES

Escherichia coli

ID16010201BR006_02e	Spring Creek	5.52	MILES

Combined Biota/Habitat Bioassessments

ID16010201BR008_02	Co-op Creek - source to mouth	3.12	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID16010201BR008_02a	upper Co-Op Creek	5.46	MILES

Sedimentation/Siltation

Phosphorus (Total)

ID16010201BR011_03a	Middle Mill Creek	1.99	MILES

Fecal Coliform

ID16010201BR013_02a	Sleight Canyon	11.29	MILES

Combined Biota/Habitat Bioassessments

ID16010201BR013_02b	upper Paris Creek	5.46	MILES

Combined Biota/Habitat Bioassessments

Fishes Bioassessments

Habitat Assessment (Streams)

Cause Unknown

ID16010201BR016_02a	St Charles Creek - headwaters to Snowslide Canyon	15.6	MILES

Temperature, water — Exceeded State WQS for SS. See temperature data in IDASA.

ID16010201BR016_03	St. Charles Creek - Little Creek to Spring Creek	2.62	MILES

Temperature, water — Exceeded state WQS for SS. See documentation in IDASA.

ID16010201BR016_03a	St Charles Creek - Little Creek to Bear Lake	2.67	MILES

Temperature, water — Exceeded state WQS for SS. See documentation in IDASA.

ID16010201BR016_03b	St Charles Creek - Snowslide Canyon to Little Creek	9.18	MILES

Temperature, water — Exceeded state WQS for SS. See documentation in IDASA.

ID16010201BR018_0La	Indian Creek	2.94	MILES

Sedimentation/Siltation

ID16010201BR020_02	Montpelier Creek - source to mouth	32.08	MILES

Escherichia coli

Sedimentation/Siltation

ID16010201BR020_02a	Little Beaver Creek	3.64	MILES

Escherichia coli

ID	Name	Size	Units
ID16010201BR020_02b	Whiskey Creek - headwaters to Montpelier Creek	5.24	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

Habitat Assessment (Streams)

Cause Unknown

Idaho WBAGII using BURP Monitoring Data (July 2006)

ID16010201BR020_02d	Home Canyon	13.22	MILES

Escherichia coli

ID16010201BR020_02e	Montpelier Creek - headwaters to Whiskey Creek	4.1	MILES

Escherichia coli

Cause Unknown

ID16010201BR020_02f	Snowslide Creek - lower	0.86	MILES

Combined Biota/Habitat Bioassessments

ID16010201BR020_03	Lower Montpelier Creek	5.31	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

Escherichia coli — See DEQ BURP bacteria data. Failed Geometric mean in 2004.

ID16010201BR020_03a	Middle Montpelier Creek	8.72	MILES

Escherichia coli

ID16010201BR020_03b	Montpelier Creek	4.8	MILES

Escherichia coli

ID16010201BR021_02	Snowslide Creek - source to mouth	5.49	MILES

Sedimentation/Siltation

ID16010201BR022_02b	Upper Georgetown Creek - headwaters to left hand fork	10.87	MILES

Selenium — Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area.

ID16010201BR022_03a	Lower Georgetown Creek - left hand fork to mouth	3.89	MILES

Escherichia coli

16010202 Middle Bear

ID16010202BR003_02b	Deep Creek	4.89	MILES

Escherichia coli

ID16010202BR003_03	Cub River - Sugar Creek to Maple Creek	5.29	MILES

Escherichia coli

ID16010202BR005_01L	Foster Reservoir	131.72	ACRES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.389 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID16010202BR005_02L	Glendale Reservoir	203.11	ACRES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.565 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID16010202BR006_06	Bear River - Oneida Narrows Reservoir Dam to Idaho/Utah bor	36.08	MILES

Temperature, water — Exceeded State WQS for SS and CWAL. See temperature data in IDASA.

ID16010202BR007_02a	Strawberry Creek	10.39	MILES

Sedimentation/Siltation

ID16010202BR009_02b	Alder Creek - headwaters to mouth	17.67	MILES

Fecal Coliform

ID16010202BR009_06	Bear River - Alexander Reservoir Dam to Denismore Creek	15.57	MILES

Temperature, water — Exceeded State WQS for SS and CWAL. See temperature data in IDASA.

ID16010202BR009_06a	Bear River - Denismore Cr to above Oneida Reservoir	21.56	MILES

Temperature, water — Exceeded State WQS for SS and CWAL. See temperature data in IDASA.

ID16010202BR014_02b	Blue Creek	27.01	MILES

Combined Biota/Habitat Bioassessments

ID16010202BR014_02c	Shingle Creek	10.57	MILES

Escherichia coli

ID16010202BR014_03a	Shingle Creek	0.84	MILES

Escherichia coli

ID16010202BR018_02b	Swan Lake Creek	13.8	MILES

Sedimentation/Siltation

Fecal Coliform

ID16010202BR019_02	Fivemile Creek - source to Dayton	9.51	MILES

Escherichia coli

ID16010202BR019_02a	Fivemile Creek - Dayton to mouth	5.7	MILES

Escherichia coli

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ID16010202BR020_02L	Weston Creek Reservoir	111.42	ACRES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.379 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID16010202BR021_02	Jenkins Hollow (Newton Creek)	12.62	MILES

Sedimentation/Siltation

ID16010202BR021_02a	Steel Canyon	0.9	MILES

Sedimentation/Siltation

16010203 Little Bear-Logan

ID16010203BR001_02a	Beaver Creek	8.47	MILES

Combined Biota/Habitat Bioassessments

ID16010203BR002_02	Logan River - source to Idaho/Utah border	9.15	MILES

Combined Biota/Habitat Bioassessments

Habitat Assessment (Streams)

Cause Unknown

Combined Biota/Habitat Bioassessments — Idaho WBAG2 and BURP Monitoring Data (June 2006) Boss Canyon Creek & Nibbley Creek BURP Locations

ID16010203BR002_03	Logan River - source to Idaho/Utah border	1.21	MILES

Sedimentation/Siltation — Delist for cause unknown and relist for sediment. Grazing has contributed to sedimentation as source of failing BURP in 2002. BURP passed in 2007 but, will continue with listing and further assess through TMDL process.

16010204 Lower Bear-Malad

ID16010204BR001_02b	Four Mile Canyon	7.59	MILES

Sedimentation/Siltation

ID16010204BR001_02c	West Cherry Creek	4.52	MILES

Combined Biota/Habitat Bioassessments

Habitat Assessment (Streams)

Cause Unknown

ID16010204BR001_02d	Henderson Creek	4.97	MILES

Sedimentation/Siltation

ID16010204BR002_02	Devil Creek - Devil Creek Reservoir Dam to mouth	10.01	MILES

Escherichia coli

ID16010204BR002_02a	Campbell Creek	2.86	MILES

Fecal Coliform

ID16010204BR002_03	Devil Creek - Devil Creek Reservoir Dam to mouth	25.2	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

Cause Unknown

ID16010204BR004_02	Devil Creek - source to Devil Creek Reservoir	14.35	MILES

Escherichia coli

ID16010204BR006_02a	First Creek	8.65	MILES

Escherichia coli

ID16010204BR007_02a	Third Creek - headwaters to Deep Creek	12.92	MILES

Escherichia coli

ID16010204BR010_02b	Upper Wright Creek - headwaters to Indian Mill Canyon	8.87	MILES

Escherichia coli

ID16010204BR010_03	middle Wright Creek - Indian Mill Canyon to Dairy Creek	2.72	MILES

Fecal Coliform

ID16010204BR010_04	Wright Creek - Dairy Creek to Daniels Reservoir	4.16	MILES

Escherichia coli

ID16010204BR011_02	Dairy Creek - source to mouth	39.8	MILES

Combined Biota/Habitat Bioassessments

ID16010204BR011_03	Dairy Creek - source to mouth	5.5	MILES

Sedimentation/Siltation

16020309 Curlew Valley

ID16020309BR001_03	Deep Creek - Rock Creek to Idaho/Utah border	44.85	MILES

Sedimentation/Siltation

ID16020309BR001_03a	Deep Creek	15.48	MILES

Sedimentation/Siltation

ID16020309BR002_02a	Sheep Creek	13.37	MILES

Sedimentation/Siltation

Fecal Coliform

ID16020309BR003_02a	Meadow Brook Creek	28.93	MILES

Escherichia coli

Sedimentation/Siltation

ID16020309BR003_03a	Rock Creek	3.72	MILES

Sedimentation/Siltation

17060108 Palouse

ID17060108CL001_02	Cow Creek - source to Idaho/Washington border	84.63	MILES
Temperature, water			
ID17060108CL001_03	Cow Creek - source to Idaho/Washington border	10.71	MILES
Temperature, water			

17060303 Lochsa

ID17060303CL001_02	Lochsa River - Deadman Creek to mouth	27.96	MILES
Temperature, water			
ID17060303CL001_05	Lochsa River - Deadman Creek to mouth	10.14	MILES
Temperature, water			
ID17060303CL003_05	Lochsa River - Old Man Creek to Deadman Creek	6.94	MILES
Temperature, water			
ID17060303CL008_05	Lochsa River - Fish Creek to Old Man Creek	6.93	MILES
Temperature, water			
ID17060303CL009_05	Lochsa River - Indian Grave Creek to Fish Creek	19.53	MILES
Temperature, water			
ID17060303CL010_02	Boulder Creek - source to mouth	41.18	MILES
Temperature, water	03/22/2010 - Added by EPA January 2001. NED		
ID17060303CL010_04	Boulder Creek - source to mouth	4	MILES
Temperature, water	03/22/2010 - Added by EPA January 2001. NED		
ID17060303CL013_05	Lochsa River- Warm Springs Creek to Indian Grave Creek	11.96	MILES
Temperature, water			
ID17060303CL020_05	Lochsa River - confluence of Crooked Fork, White Sand Creek	13.11	MILES
Temperature, water			
ID17060303CL032_03	Storm Creek - source to mouth	4.81	MILES
Temperature, water			
ID17060303CL052_02	Fish Creek - Hungery Creek to mouth	7.89	MILES
Temperature, water	03/22/2010 - Added by EPA January 2001. NED		
ID17060303CL052_03	Fish Creek - Hungery Creek to mouth	0.09	MILES
Temperature, water	03/22/2010 - Added by EPA January 2001. NED		
ID17060303CL052_04	Fish Creek - Hungery Creek to mouth	4.62	MILES
Temperature, water	03/22/2010 - Added by EPA January 2001. NED		

ID17060303CL057_02	Fish Creek - headwaters and tributaries	48.41	MILES

Temperature, water

03/22/2010 - Added by EPA January 2001. NED

ID17060303CL057_03	Fish Creek - source to Hungery Creek	8.41	MILES

Temperature, water — 03/22/2010 - Added by EPA January 2001. NED

ID17060303CL061_02	Deadman Creek - source to East Fork Deadman Creek	8.67	MILES

Temperature, water — 03/22/2010 - Added by EPA January 2001. NED

ID17060303CL062_03	Canyon Creek - source to mouth	0.63	MILES

Temperature, water — 03/22/2010 - Added by EPA January 2001. NED

ID17060303CL063_02	Pete King Creek - Walde Creek to mouth	12.72	MILES

Temperature, water — 03/22/2010 - Added by EPA January 2001. NED

ID17060303CL063_03	Pete King Creek - Walde Creek to mouth	5.5	MILES

Temperature, water — 03/22/2010 - Added by EPA January 2001. NED

ID17060303CL064_02	Walde Creek - source to mouth	12.46	MILES

Temperature, water

17060306 Clearwater

ID17060306CL001_07	Lower Granite Dam pool	4.99	MILES

Dissolved Gas Supersaturation

ID17060306CL002_07	Clearwater River - Potlatch River to Lower Granite Dam pool	10.09	MILES

Dissolved Gas Supersaturation

ID17060306CL006_02	Sweetwater Creek - source to Webb Creek	47.72	MILES

Sedimentation/Siltation

Temperature, water

Cause Unknown — Pesticides, Nutrients Suspected Impairment□Low DO due to suspected Organic Enrichment

ID17060306CL006_03	Sweetwater Creek - source to Webb Creek	3.16	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Pesticides, Nutrients Suspected ImpairmentLow DO due to suspected Organic Enrichment

ID17060306CL006_04	Sweetwater Creek - source to Webb Creek	6.74	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Pesticides, Nutrients Suspected ImpairmentLow DO due to suspected Organic Enrichment

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ID17060306CL007_02	Webb Creek - source to mouth	34.87	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment□Low DO due to suspected Organic Enrichment

ID17060306CL013_07	Clearwater River - North Fork Clearwater River to mouth	25.77	MILES

Dissolved Gas Supersaturation

ID17060306CL016_03	Big Canyon Creek - source to mouth	27.03	MILES

Combined Biota/Habitat Bioassessments

Fishes Bioassessments

Habitat Assessment (Streams)

Cause Unknown

ID17060306CL019_02	Holes Creek - source to mouth	26.12	MILES

Ammonia (Un-ionized)

Oil and Grease

Sedimentation/Siltation

Fecal Coliform

Cause Unknown — Pesticides, Metals, Nutrients Suspected Impairment Low DO due to suspected Organic Enrichment

ID17060306CL019_03	Holes Creek - source to mouth	2.71	MILES

Ammonia (Un-ionized)

Oil and Grease

Sedimentation/Siltation

Cause Unknown — Pesticides, Metals, Nutrients Suspected ImpairmentLow DO due to suspected Organic Enrichment

ID17060306CL020_02	Long Hollow Creek - source to mouth	32.61	MILES

Cause Unknown

ID17060306CL020_03	Long Hollow Creek - source to mouth	4.04	MILES

Sedimentation/Siltation

Fecal Coliform

Cause Unknown — Nutrients Suspected ImpairmentLow DO due to suspected Organic Enrichment

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ID17060306CL023_02	Sixmile Creek - source to mouth	32.7	MILES

Ammonia (Un-ionized)

Oil and Grease

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Pesticides, Nutrients Suspected ImpairmentLow DO due to suspected Organic Enrichment

ID17060306CL023_03	Sixmile Creek - source to mouth	0.66	MILES

Ammonia (Un-ionized)

Oil and Grease

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Pesticides, Nutrients Suspected ImpairmentLow DO due to suspected Organic Enrichment

ID17060306CL024_02	Lawyer Creek - source to mouth	239.16	MILES

Ammonia (Un-ionized)

Oil and Grease

Oxygen, Dissolved

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17060306CL024_03	Lawyer Creek - source to mouth	20.48	MILES

Ammonia (Un-ionized)

Escherichia coli

Oil and Grease

Sedimentation/Siltation

Temperature, water

Cause Unknown — Nutrients Suspected ImpairmentLow DO due to suspected Organic Enrichment

ID17060306CL025_02	Sevenmile Creek - source to mouth	23.59	MILES

Sedimentation/Siltation

ID17060306CL025_03	Sevenmile Creek - source to mouth	2.43	MILES

Sedimentation/Siltation

ID17060306CL029_02	Eldorado Creek - 1st and 2nd Order Tributaries	52.08	MILES

Combined Biota/Habitat Bioassessments

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ID17060306CL031_02	Jim Brown Creek - 1st and 2nd Order Tributaries	44.63	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060306CL031_03	Jim Brown Creek - 3rd Order	5.51	MILES

Escherichia coli

Sedimentation/Siltation

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17060306CL032_02	Musselshell Creek - 1st and 2nd order tributaries	30.83	MILES

Combined Biota/Habitat Bioassessments

ID17060306CL032_03	Musselshell Creek - 3rd Order	4.33	MILES

Combined Biota/Habitat Bioassessments

ID17060306CL039_03	Orofino Creek, including Rhodes, Cow Creek	18.7	MILES

Temperature, water

ID17060306CL040_02a	Whiskey Creek	20.81	MILES

Combined Biota/Habitat Bioassessments

ID17060306CL040_03	Whiskey Creek - source to mouth	10.29	MILES

Combined Biota/Habitat Bioassessments

ID17060306CL041_02	Bedrock Creek - source to mouth	19.94	MILES

Ammonia (Un-ionized)

Oil and Grease

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment□Low DO due to suspected Organic Enrichment

ID17060306CL041_03	Bedrock Creek - source to mouth	5.82	MILES

Combined Biota/Habitat Bioassessments

ID17060306CL043_02	Pine Creek - source to mouth	25.2	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment□Low DO due to suspected Organic Enrichment

ID17060306CL043_03	Pine Creek - source to mouth	6.43	MILES

Ammonia (Un-ionized)

Oil and Grease

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment

ID17060306CL066_02	Catholic Creek - source to mouth	16.11	MILES

Combined Biota/Habitat Bioassessments

ID17060306CL067_02	Hatwai Creek - source to mouth	44.78	MILES

Escherichia coli

Temperature, water

Nutrient/Eutrophication Biological Indicators

17060307 Upper North Fork Clearwater

ID17060307CL007_02b	Hem Creek - source to mouth	9.96	MILES

Temperature, water

3/23/2009 (NED) - Per EPA's Partial Approval/Partial Disapproval of Idaho's Final 2008 303(d) List letter dated 2/04/2009, EPA disapproved delisting Hem Creek for temperature because the rationale DEQ provided to EPA did not support the conclusion that Hem Creek stream temperatures are natural. EPA subsequently took public comment on this reversal that ended May 15, 2009.

5/3/2010 (NED) - EPA concluded in their final decision letter dated October 13, 2009 that Hem Creek is water quality-limited and mandated that DEQ add Hem Creekback to the 303(d) list. Refer to the following link to review EPA's final determination on Hem Creek: http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/2008.cfm#lbr_hem

ID17060307CL033_03	Lake Creek - 3rd order segment	4.85	MILES

Temperature, water

17060308 Lower North Fork Clearwater

ID17060308CL001_06	North Fork Clearwater River - 6th Order	1.96	MILES

Dissolved Gas Supersaturation

ID17060308CL002_02b	Elkberry Creek	32.24	MILES

Combined Biota/Habitat Bioassessments

ID17060308CL002_02c	Middle Fork Robinson Creek	25.57	MILES

Combined Biota/Habitat Bioassessments

ID17060308CL003_02	Gold Creek, Meadow Creek, unnamed tributary	29.71	MILES

Temperature, water

ID17060308CL003_03	Reeds Creek - Alder Creek to Gold Creek	3.35	MILES

Temperature, water

ID17060308CL003_04	Reeds Creek - Gold Creek to unnamed tributary	1.85	MILES

Temperature, water

ID17060308CL004_02	Reeds Creek - source to Deer Creek, inc. tribs	29.23	MILES

Temperature, water

ID17060308CL004_03	Reeds Creek - Deer Creek to Alder Creek	8.05	MILES

Temperature, water

ID17060308CL005_02	Alder Creek - source to mouth	30.89	MILES

Combined Biota/Habitat Bioassessments

ID17060308CL009_02	Beaver Creek - tributaries	38.4	MILES

Temperature, water

ID17060308CL009_02c	Bingo Creek - source to mouth	2.77	MILES

Temperature, water

ID17060308CL009_02e	Beaver Creek - headwater	4.73	MILES

Temperature, water

ID17060308CL009_03	Beaver Creek - source to mouth	5.65	MILES

Temperature, water

ID17060308CL009_04	Beaver Creek - source to mouth	7.7	MILES

Temperature, water

ID17060308CL010_03	Isabella Creek - Elmer/Jug Creek to mouth	5.4	MILES

Temperature, water

ID17060308CL020_02	Unnamed tributary to Stony Creek	2.09	MILES

Temperature, water

ID17060308CL020_04	Stony Creek - Glover Creek to Breakfast Creek	3.68	MILES

Temperature, water

ID17060308CL020_04a	Breakfast Creek - 4th Order, Stony Cr to Dworshak Reservoir	1.91	MILES

Temperature, water

ID17060308CL021_02	Floodwood Creek - tributaries	43.66	MILES

Temperature, water

ID17060308CL021_02a	Floodwood Creek - headwaters to Pinchot Creek	8.23	MILES

Temperature, water

ID17060308CL021_03	Floodwood Creek - 3rd order	9.94	MILES

Temperature, water

ID17060308CL021_03a	Floodwood Creek - Pinchot Creek to Goat Creek	1.66	MILES

Temperature, water

ID17060308CL023_02	Stony Creek - source to Glover; tributaries	21.44	MILES

Temperature, water

ID17060308CL023_02a	Stony Creek - 2nd Order	2.77	MILES

Temperature, water

ID17060308CL023_03	Stony Creek - unnamed trib to Glover Creek	5.79	MILES

Temperature, water

ID17060308CL025_02	Breakfast Creek - source to Stony Creek	10.04	MILES

Temperature, water

Panhandle

17010104 Lower Kootenai

ID17010104PN001_02	1st & 2nd order tribs Kootenai R- Shorty Isl. - Id/BC border	71.17	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17010104PN001_08	Kootenai River - Shorty's Island to the Id/Canadian border	36.89	MILES

Temperature, water

ID17010104PN003_02	1st& 2nd order tribs Grass Creek	27.34	MILES

Benthic-Macroinvertebrate Bioassessments

Temperature, water

ID17010104PN003_03	Grass Creek - third order portion to Idaho/Canadian border	7.73	MILES

Temperature, water

ID17010104PN004_02	Blue Joe Creek - source to Idaho/Canadian border	15.44	MILES

Cadmium

Lead

Temperature, water

Zinc

pH

ID17010104PN005_04	Smith Creek - Cow Creek to Kootenai R.	7.87	MILES

Temperature, water

ID17010104PN006_03	Cow Creek - source to mouth	2.16	MILES

Temperature, water

ID17010104PN007_03	Smith Creek - source to Cow Creek	4.99	MILES

Temperature, water

ID17010104PN008_02	Long Canyon Creek - source to mouth	29.81	MILES

Temperature, water

ID17010104PN009_03	Parker Creek - lower portion, agricultural area	0.65	MILES

Benthic-Macroinvertebrate Bioassessments

ID17010104PN010_03	Trout Creek - 3rd order to branch	4.59	MILES

Temperature, water

ID17010104PN010_03a	Trout Creek - lower portion below branch	2.94	MILES

Benthic-Macroinvertebrate Bioassessments

Temperature, water

ID17010104PN011_02	Upper Ball Creek - source to forest edge	34.49	MILES

Temperature, water

ID17010104PN011_02a	Ball Creek- lower potion, forest to Kootenai River	0.78	MILES

Benthic-Macroinvertebrate Bioassessments

Temperature, water

This AU is in an EPA designated bull trout stream. Temp logger data on the upstream AU shows temperature impairment. Status inferred from upstream segment.

ID17010104PN012_08	Kootenai River - Deep Creek to and including Shorty's Island	5.74	MILES

Temperature, water

ID17010104PN013_03	Myrtle Creek - Jim Creek to mouth	11.2	MILES

Temperature, water

This AU is on EPA's Bull Trout List, the data collected fails EPA's Bull Trout Criteria. This Assesessment was performed by Glen Petit, CDA.

ID17010104PN014_02	Cascade Creek - source to mouth	3.58	MILES

Temperature, water

ID17010104PN016_03	Lower Snow Creek	7.57	MILES

Temperature, water

ID17010104PN017_02	Caribou Creek - source to mouth	10.88	MILES

Temperature, water

ID17010104PN020_03	Ruby Creek - lower, Gold Cr to Deep Cr	1.6	MILES

Temperature, water

ID17010104PN021_03	Fall Creek - lower, 3rd order portion to Deep Cr	8.07	MILES

Temperature, water

ID17010104PN023_0L	McArthur Lake	336.06	ACRES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.650 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17010104PN024_03	Dodge Creek -	0.45	MILES

Benthic-Macroinvertebrate Bioassessments

Temperature, water

ID17010104PN026_03	Trail Creek - source to Highway	2.62	MILES

Temperature, water

ID17010104PN027_03	Brown Creek - lower, Twentymile Cr to Deep Cr	2.37	MILES

Benthic-Macroinvertebrate Bioassessments

Temperature, water

ID17010104PN029_08	Kootenai River - Moyie River to Deep Creek	13.16	MILES

Temperature, water

ID17010104PN030_03	Cow Creek - lower, Brush Cr to subsurface flow	2.76	MILES

Combined Biota/Habitat Bioassessments

ID17010104PN031_08	Kootenai River - Idaho/Montana to Moyie River	10.78	MILES

Temperature, water

ID17010104PN032_03	Boulder Creek - East Fork Boulder Creek to mouth	4.19	MILES

Temperature, water

ID17010104PN035_03	Curley Creek - lower, unnamed trib to Kootenai R	8.6	MILES

Temperature, water

ID17010104PN036_03	Fleming Creek - lower	3.49	MILES

Temperature, water

ID17010104PN037_03	Rock Creek - lower	1.33	MILES

Temperature, water

ID17010104PN038_03	Mission Creek - Brush Creek to mouth	2.91	MILES

Temperature, water

ID17010104PN039_02	Brush Creek - source to mouth	9.71	MILES

Benthic-Macroinvertebrate Bioassessments

ID17010104PN040_03	Mission Creek - Idaho/Canadian border to Brush Creek	9.06	MILES

Temperature, water

17010105 Moyie

ID17010105PN001_05	Moyie River - Moyie Falls Dam to Kootenai River	1.88	MILES

Temperature, water

ID17010105PN002_02	Moyie River - Meadow Creek to Moyie Falls Dam	9.19	MILES

Temperature, water

ID17010105PN003_02	Skin Creek - Idaho/Montana border to mouth	8.81	MILES

Temperature, water

ID17010105PN004_02	Deer Creek - source to mouth	30.94	MILES

Temperature, water

ID17010105PN004_03	Deer Creek - source to mouth	6.26	MILES

Temperature, water

ID17010105PN006_02	Tribs to Moyie R. btwn CA border and Round Prairie Crk	22.86	MILES

Temperature, water

ID17010105PN007_02	Canuck Creek - Idaho/Montana border to Idaho/Canadian bord	11.59	MILES

Temperature, water

ID17010105PN009_02	Gillon Creek - Idaho/Canadian border to mouth	7.34	MILES

Temperature, water

ID17010105PN010_03	Round Prairie Creek - source to Gillon Creek	2.96	MILES

Temperature, water

ID17010105PN011_02	Miller Creek - source to mouth	3.69	MILES

Temperature, water

ID17010105PN012_02	Meadow Creek - source to mouth	22.65	MILES

Benthic-Macroinvertebrate Bioassessments

Temperature, water

ID17010105PN012_03	Meadow Creek - source to mouth	2.63	MILES

Temperature, water

17010213 Lower Clark Fork

ID17010213PN001_08	Clark Fork River Delta - Mosquito Creek to Pend Oreille Lake	11.27	MILES

Temperature, water

ID17010213PN003_08	Clark Fork River - Cabinet Gorge Dam to Mosquito Creek	9.8	MILES

Temperature, water

ID17010213PN005_08	Clark Fork River - Idaho/Montana border to Cabinet Gorge Da	0.55	MILES

Temperature, water

ID17010213PN021_02	Spring Creek - Headwaters to Lightning Creek	10.27	MILES

Combined Biota/Habitat Bioassessments

This cause of impairment was assessed on 12/15/2009 by CDA RO Staff (R.Steed, K. Keith, J. Bergquist, G. Pettit). The cause of impairment is unknown at this time. Monitoring and stressor identification should be performed prior to development of SBA and TMDL.

17010214 Pend Oreille Lake

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ID17010214PN001_08	Pend Oreille River - Priest River to Albeni Falls Dam	3.36	MILES

Temperature, water

Dissolved Gas Supersaturation

ID17010214PN002_08	Pend Oreille River - Pend Oreille Lake to Priest River	32.56	MILES

Temperature, water

Dissolved Gas Supersaturation

ID17010214PN003_02	Hoodoo Creek - source to mouth	51.84	MILES

Escherichia coli

2010: This Assessment unit was assessed on 1/29/2010 by CDA RO Staff (R. Steed, K. Stromberg, K. Keith, T. Clyne, R. Witherow). 2006 BURP Escherichia coliform sample exceed Idaho Water Quality Standards numeric criteria. Geomean in 2005 was 1300 cfu/100mL.

ID17010214PN010_03	Brickel Creek - Idaho/Washington border to mouth	5.62	MILES

Combined Biota/Habitat Bioassessments

This cause of impairment AU was assessed on 12/15/2009 by CDA RO Staff (R.Steed, K. Keith, T. Herron, J. Bergquist, G. Pettit) The lower portion of Brickle Creek has been straightened and otherwise modified. This modification has greatly contributed to the poor habitat conditions that exist, making it impossible to collect macroinvertebrates. It would be unreasonable to expect to get passing bug scores from habitat alone, or evaluate as a lotic water body. Other water quality issues are likely to exist upstream and stressor identification should be pursued.

ID17010214PN017_0L	Shepard Lake	96.37	ACRES

Mercury

3/15/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.586 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17010214PN018_02a	Falls Creek	13.21	MILES

Sedimentation/Siltation

Added 3/27/2006

ID17010214PN018_02b	Boyer Slough	12.33	MILES

Benthic-Macroinvertebrate Bioassessments

ID17010214PN018L_0L	Pend Oreille Lake	80827.85	ACRES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.611 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17010214PN022_02	West Gold Creek	9.62	MILES

Sedimentation/Siltation

Sediment TMDL developed for Gold Creek did not include West Gold Creek.

ID17010214PN027_03	Granite Creek, Lower	4.68	MILES

Nutrient/Eutrophication Biological Indicators

ID17010214PN038_02	Sand Creek - headwaters to Pack R	13.21	MILES

Escherichia coli

November 17, 2009. Robert Steed added E. coli to "Secondary Contact Recreation" use. CDA RO has data that shows that E. coli concentrations exceed WQS.

2010: Sand Creek, headwaters to Pack River was assessed on 1/7/2010 by CDA RO Staff (R. Steed, T. Clyne, and K. Stromberg). BURP data in 2005 (2005SCDAA0023) collected E. coli data with geometric mean of 346 mpn/100ml exceeding criteria.

ID17010214PN054_03	Syringa Creek - Lower, 3rd order portion to Pend Oreille R.	1.33	MILES

Combined Biota/Habitat Bioassessments

ID17010214PN058_02	Johnson Creek - headwaters to Pend Oreille R.	16.22	MILES

Combined Biota/Habitat Bioassessments

ID17010214PN059_03	Riley Creek - Lower, to Pend Oreille R.	4.04	MILES

Escherichia coli

17010215 Priest

ID17010215PN001_05	Lower Priest River - Upper West Branch Priest River to mouth	35.96	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17010215PN002_03	Big Creek - source to mouth	3.59	MILES

Escherichia coli

2010: Big Creek AU was assessed on 1/7/2010 by CDA RO Staff (R. Steed, T. Clyne, K. Stromberg) This AU was previously assessed in 2003 as CWAL and SCR in the "FS" category. The 2006 BURP ALUS supports the 2003 status call for CWAL but bacteria monitoring shows NFS for SCR (Geomean 192.78). Assessment was performed following the WBAG II protocol, and this AU is in the Full Support category for CWAL and in the Full Support category for SCR. The 2008 CWE report for Big Creek identifies a high adverse temperature rating for Big Creek. Follow up, with monitoring should follow.

ID17010215PN008_03	Soldier Creek - source to mouth	1.78	MILES

Temperature, water

ID17010215PN010_02	Indian Creek - source to mouth	21.62	MILES

Temperature, water

ID17010215PN011_02	Bear Creek - source to mouth	11.35	MILES

Fishes Bioassessments

ID17010215PN012_02	Two Mouth Creek - source to mouth	27.77	MILES

Temperature, water

ID17010215PN013_02	Lion Creek - source to mouth	32.42	MILES

Temperature, water

ID17010215PN017_02	Trapper Creek - source to mouth	22.48	MILES

Temperature, water

ID17010215PN017_03	Trapper Creek - source to mouth	1.71	MILES

Temperature, water

ID17010215PN018_02	Upper Priest River - Idaho/Canadian border to mouth	47.34	MILES

Temperature, water

ID17010215PN019_02	Hughes Fork - source to mouth	57.11	MILES

Temperature, water

EPA add in 1998.

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ID17010215PN020_03	Beaver Creek - source to mouth	1.66	MILES

Temperature, water

ID17010215PN022_04	Granite Creek - Idaho/Washington border to mouth	13.94	MILES

Temperature, water

ID17010215PN023_02	Reeder Creek - source to mouth	22.63	MILES

Temperature, water

ID17010215PN023_03	Reeder Creek - source to mouth	0.64	MILES

Temperature, water

ID17010215PN024_03	Kalispell Creek - Idaho/Washington border to mouth	12.18	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17010215PN025_02	Lamb Creek - Idaho/Washington border to mouth	27.94	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17010215PN026_02	Binarch Creek - Idaho/Washington border to mouth	13.16	MILES

Temperature, water

ID17010215PN027_03	Upper West Branch Priest River - Idaho/Washington border to	5.06	MILES

Combined Biota/Habitat Bioassessments

ID17010215PN027_04	Upper West Branch Priest River - Idaho/Washington border to	6.72	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17010215PN028_03	Goose Creek - Idaho/Washington border to mouth	5.23	MILES

Fecal Coliform

ID17010215PN030_03	Lower West Branch Priest River - Idaho/Washington border to	11.91	MILES

Temperature, water

ID17010215PN030_04	Lower West Branch Priest River - ID/WA border to Priest Rive	10.81	MILES

Temperature, water

17010216 Pend Oreille

ID17010216PN002_08	Pend Oreille River - Albeni Falls Dam to Idaho/Washington	3.89	MILES

Temperature, water

Dissolved Gas Supersaturation

17010301 Upper Coeur d Alene

ID17010301PN001_02	North Fork Coeur d'Alene River tributaries below Prichard Cr	77.86	MILES

Temperature, water

2010: AU Name and Description changed 2/4/2010 by K. Stromberg. This AU was split during the 2010 assessment and reporting cycle into two AUs: ID17010301PN001_02 and ID17010301PN001_02a. The split was done because the AU was too large and varied for a representative assessment, and because there is a change in valley form and land management between the two sections. Above Prichard Creek, the valley is narrower and land is primarily in USFS ownership. Below Prichard Creek, the valley widens and land is under mixed ownership with a range of land use patterns. The split also aligns the AU with USGS hydrologic unit code boundaries for 5th Code major watersheds.

This AU is proposed for listing in 2010 as not fully supporting cold water aquatic life due to exceedances of the Idaho numeric water quality criteria for temperature. Tier 1 USFS data showed exceedances of the salmonid spawning criteria.

2010: AU Name and Description changed 2/4/2010 by K. Stromberg. This AU was split during the 2010 assessment and reporting cycle into two AUs: ID17010301PN001_02 and ID17010301PN001_02a. The split was done because the AU was too large and varied for a representative assessment, and because there is a change in valley form and land management between the two sections. Above Prichard Creek, the valley is narrower and land is primarily in USFS ownership. Below Prichard Creek, the valley widens and land is under mixed ownership with a range of land use patterns. The split also aligns the AU with USGS hydrologic unit code boundaries for 5th Code major watersheds.

This AU is proposed for listing in 2010 as not fully supporting cold water aquatic life due to exceedances of the Idaho numeric water quality criteria for temperature. Tier 1 USFS data showed exceedances of the salmonid spawning criteria.

ID17010301PN001_05	North Fork Coeur d'Alene River, below Prichard Cr.	26.29	MILES

Temperature, water

2010: AU Name and Description changed 2/4/2010 by K. Stromberg. This AU was split during the 2010 assessment and reporting cycle into two AUs: ID17010301PN001_05 and ID17010301PN001_05a. The split was done because the AU was too large and varied for a representative assessment, and because there is a change in valley form and land management between the two sections. Above Prichard Creek, the valley is narrower and land is primarily in USFS ownership. Below Prichard Creek, the valley widens and land is under mixed ownership with a range of land use patterns. The split also aligns the AU with USGS hydrologic unit code boundaries for 5th Code major watersheds.

This AU is proposed for listing in 2010 as not fully supporting cold water aquatic life due to exceedances of the Idaho numeric water quality criteria for temperature. Tier 1 USFS data showed exceedances of the temperature criteria for salmonid spawning and cold water aquatic life. 2/4/2010 K. Stromberg.

ID17010301PN001_05a	North Fork Coeur d'Alene R. btw Yellowdog and Prichard Cr	14.75	MILES

Temperature, water

This AU is proposed for listing in 2010 as not fully supporting cold water aquatic life due to exceedances of the Idaho numeric water quality criteria for temperature. Tier 1 USFS data showed exceedances of the temperature criteria for salmonid spawning and cold water aquatic life. 2/11/2010 K. Stromberg.

ID17010301PN002_03	Graham Creek, below Deceitful Gulch	1.06	MILES

Temperature, water

2010: AU Name and Description changed 2/4/2010 by K. Stromberg.

E. coli sampling indicates full support of secondary contact recreation.

DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning and exceedances of EPA bull trout temperature criteria. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN003_02	Beaver Creek, headwaters and tributaries	44.54	MILES

Cadmium

Zinc

Temperature, water — 2010: AU Name and Description changed 2/4/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN003_03	Beaver Creek, below White Cr.	3.7	MILES

Cadmium

Lead

Zinc

Temperature, water — 2010: AU Name and Description changed 2/4/2010 by K. Stromberg. DEQ temperature data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN004_02	Prichard Cr., tributaries between Butte Gulch and Eagle Cr.	4.17	MILES

Zinc

ID17010301PN004_03	Prichard Creek - between Butte Gulch and Eagle Creek	5.45	MILES

Arsenic

Cadmium

Copper

Lead

Zinc

ID17010301PN004_04	Prichard Creek below Eagle Creek	2.94	MILES

Cadmium

Lead

Zinc

Temperature, water — 2010: AU Name and Description changed 2/4/2010 by K. Stromberg. DEQ temperature data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN005_02	Prichard Creek - headwaters and tributaries above Butte Gul	24.34	MILES

Cadmium

Lead

Zinc

Temperature, water — 2010: AU Description changed 2/4/2010 by K. Stromberg. DEQ temperature data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

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ID17010301PN005_03	Prichard Creek - between Barton Gulch to Butte Gulch	1.98	MILES

Cadmium

Lead

Zinc

ID17010301PN008_02	West Fork Eagle Creek and tributaries	14.68	MILES

Temperature, water	2010: AU Description changed 2/4/2010 by K. Stromberg. DEQ temperature data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN009_03	Lost Creek, below East Fork Lost Creek	1.28	MILES

Temperature, water	2010: AU Name and Description changed 2/4/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN010_03	Shoshone Creek, below Falls Creek	6.76	MILES

Temperature, water	2010: AU Name and Description changed 2/4/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for cold water aquatic life and salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN011_02	Falls Creek and tributaries	8.09	MILES

Temperature, water	2010: AU Name and Description changed 2/4/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning and EPA criteria for bull trout. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/4/2010 K. Stromberg.

ID17010301PN012_02	Shoshone Creek, headwaters and tribs above Falls Cr	46.84	MILES

Temperature, water	2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN012_03	Shoshone Creek, between Little Lost Fork and Falls Creek	7.07	MILES

Temperature, water	2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN013_02	NF Coeur d'Alene R tributaries btw Tepee Cr and Yellowdog C	34.05	MILES

Temperature, water	2010: AU Name and Description changed 2/11/2010 by K. Stromberg. This AU was split during the 2010 assessment and reporting cycle into two AUs: ID17010301PN013_02 and ID17010301PN013_02a. The split was done because the AU was too large and varied for a representative assessment, and because there is a change in valley form and land management between the two sections. Above Tepee Creek, the watershed is primarily roadless and land is in USFS ownership. Below Tepee Creek, the valley widens and there is more human activity and road development. The split also aligns the AU with USGS hydrologic unit code boundaries for 5th Code major watersheds. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

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ID17010301PN013_04	North Fork Coeur d'Alene River btw Jordan Cr and Tepee Cr	6.83	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN013_05	North Fork Coeur d'Alene River btw Tepee Cr and Yellowdog	11.87	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. This AU is proposed for listing in 2010 as not fully supporting cold water aquatic life due to exceedances of the Idaho numeric water quality criteria for temperature. Tier 1 USFS data showed exceedances of the temperature criteria for salmonid spawning and cold water aquatic life. 2/11/2010 K. Stromberg.

ID17010301PN014_03	Jordan Creek and lower Lost Fork below Plant Cr.	3.39	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN015_02	NF Coeur d'Alene River, upper, headwaters and tributaries	70.23	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 DEQ and USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended maintain listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN015_03	NF Coeur d'Alene R., upper, and lower Buckskin Cr.	6.02	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 DEQ and USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended maintain listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN015_04	NF Coeur d'Alene R. between Buckskin Cr. and Jordan Cr.	9.52	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended maintain listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN016_02	West Elk Creek and Cataract Creek	7.32	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN017_04	Tepee Creek, between Trail and Independence Cr.	4.13	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN017_05	Tepee Creek, below Independence Cr.	4.7	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning and cold water aquatic life. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN018_02	Independence Creek headwaters and tributaries	68.87	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN018_03a	Declaration Creek, lower	1.53	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN018_03b	Snow Creek, lower	2.75	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN018_04	Independence Creek, below Declaration Cr.	10	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning and cold water aquatic life. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN019_02	Trail Creek - headwaters and tributaries	35.65	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN019_03	Trail Creek, below Stewart Cr.	6.29	MILES

Temperature, water

11/17/2009 Robert Steed, DEQ 1999 temperature data show violation of WQS.

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. DEQ data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN020_02	Teepee Creek - headwaters and tributaries	48.55	MILES

Temperature, water

2010: AU Name and Description changed 2/11/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/11/2010 K. Stromberg.

ID17010301PN020_03	Teepee Creek, between Short Cr and Trail Cr	4.6	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN021_02	Brett Creek and tributaries	6.55	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN022_02	Miners Creek and tributaries	4.96	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

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ID17010301PN023_03	Flat Creek, lower	4.68	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN024_02	Yellowdog Creek - Headwaters to NF CDA River	12.2	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended listing as "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN026_02	Brown Creek and tributaries	7.79	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning and exceedances of EPA bull trout temperature criteria. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN028_02	Steamboat Creek - headwaters to tributaries	47.23	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN028_03	Steamboat Creek and West Fork Steamboat Cr. below Comfy	6.86	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN029_03	Cougar Gulch, btw EF Cougar Gulch and NF CDA River	6.7	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN030_02a	Little North Fork Coeur d'Alene R tributaries above Iron Cr.	16.34	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN030_02c	Little NF Coeur d'Alene R tribs btw Hudlow and Deception Cr	26.02	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN030_02d	Little North Fork Coeur d'Alene R tributaries below Skookum	30.97	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN030_03	Little NF CDA River - btw Solitaire and Deception Cr	11.26	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN030_04	Little North Fork CDA River below Skookum Cr	23.85	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning and cold water aquatic life. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN031_02	Bumblebee Creek and tributaries	7.93	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN032_02	Laverne Creek and tributaries	8.91	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg

ID17010301PN033_02	Leiberg Creek and tributaries	12.96	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg

ID17010301PN034_02	Bootjack Creek and tributaries	5.14	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg

ID17010301PN035_02	Iron Creek and tributaries	13.44	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN036_02	Burnt Cabin Creek and tributaries	12.99	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ data and Tier 1 USFS temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN037_02	Deception Creek and tributaries	8.34	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN038_03	Skookum Creek, lower	0.91	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. Earlier evaluation of 1999 DEQ temperature data mistakenly found no exceedances of temperature criteria. Evaluation in 2009 of DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

ID17010301PN039_03	Copper Creek, below Homer Cr.	2.75	MILES

Temperature, water

2010: AU Name and Description changed 2/12/2010 by K. Stromberg. DEQ temperature data showed exceedances of Idaho water quality criteria for salmonid spawning. AU status in 2010 recommended "Not Fully Supporting" for CWAL and SS based on these data and exceedances. 2/12/2010 K. Stromberg.

17010302 South Fork Coeur d Alene

ID17010302PN001_02	South Fork Coeur d'Alene River - Tributaries below Placer Cr	62.8	MILES

Cadmium

Lead

Zinc

Temperature, water

2010: Twomile Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010302PN001_03	South Fork Coeur d'Alene River - Canyon Creek to mouth	8.46	MILES

Cadmium

Lead

Zinc

ID17010302PN001_04	South Fork Coeur d'Alene River - Canyon Creek to mouth	10	MILES

Cadmium

Lead

Zinc

ID17010302PN001_05	South Fork Coeur d'Alene River - Canyon Creek to mouth	2.28	MILES

Cadmium

Lead

Temperature, water

Zinc

ID17010302PN002_04	Pine Creek - East Fork Pine Creek to mouth	5.31	MILES

Cadmium

Lead

Zinc

ID17010302PN004_02	East Fork Pine Creek - source to mouth	22.55	MILES

Cadmium

Lead

Zinc

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ID17010302PN004_03	East Fork Pine Creek - source to mouth	4	MILES

Cadmium

Lead

Zinc

ID17010302PN006_02	Government Gulch - source to mouth	3.54	MILES

Cadmium

Lead

Zinc

ID17010302PN007a_02	Big Creek - source to mining impact area	22.77	MILES

Temperature, water

2010: Big Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010302PN007a_03	Big Creek - source to mining impact area	4.42	MILES

Temperature, water

2010: Big Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010302PN009a_02	Lake Creek - source to mining impact area	1.99	MILES

Temperature, water

2010: This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010302PN009b_02	Lake Creek - mining impact area to mouth	1.54	MILES

Cause Unknown

Metals Suspected Impairment

ID17010302PN010_02	Placer Creek - source to mouth	17.61	MILES

Temperature, water

2010: Placer Cr. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010302PN011_03	South Fork Coeur d'Alene River - from and including Daisy Gu	9.48	MILES

Cause Unknown — Metals Suspected Impairment

ID17010302PN013_02	South Fork Coeur d'Alene River - source to Daisy Gulch	10.26	MILES

Temperature, water

2010: This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010302PN014_02	Canyon Creek - from and including Gorge Gulch to mouth	8.64	MILES

Cadmium

Lead

Temperature, water

Zinc

ID17010302PN015_02	Canyon Creek - source to Gorge Gulch	4.29	MILES

Cadmium

Lead

Temperature, water

Zinc

ID17010302PN016_02	Ninemile Creek - from and including East Fork Ninemile Creek	9.32	MILES

Cadmium

Lead

Zinc

Temperature, water

Sediment was identified as the unknown pollutant during the development of the subbasin assessment and TMDL in 2002, subsequent data also shows violations temperature criteria.

ID17010302PN017_02	Ninemile Creek - source to East Fork Ninemile Creek	1.79	MILES

Cadmium

Lead

Zinc

ID17010302PN018_02	Moon Creek - source to mouth	4.64	MILES

Cadmium

Lead

Temperature, water

Zinc

ID17010302PN018_03	Moon Creek - source to mouth	1.76	MILES

Cadmium

Lead

Temperature, water

Zinc

Temperature, water

2010: Moon Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010302PN020_02	Bear Creek - source to mouth	13.64	MILES

Temperature, water

17010303 Coeur d Alene Lake

ID17010303PN001_02	Tribs to Coeur d'Alene Lake	49.95	MILES

Cause Unknown

Nutrients Suspected Impairment

ID17010303PN001L_0L	Coeur d'Alene Lake	27968.29	ACRES

Cadmium

Lead

Zinc

ID17010303PN002_02	Cougar Creek - source to mouth	15.7	MILES

Temperature, water

ID17010303PN004_02	Mica Creek - source to mouth	24.18	MILES

Temperature, water

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ID17010303PN005_02	Fighting Creek - headwaters to Tribal boundary	15.04	MILES

Sedimentation/Siltation

Escherichia coli

2010: (R. Steed, K. Keith) In 2008, Bellgrove Creek was BURP'd and assessed for beneficial use support, and results from the process concluded beneficial uses are not supported. The creek is currently listed on Idaho's 2008 Integrated Report as impaired for E. coli. Just above the sampling site is a confined elk feeding operation that has been documented through enforcement actions to be the primary source of the high E. coli. Visual observations during both rain-on-snow events showed gully erosion from the property into Bellgrove Creek. These observations, along with E. coli exceedances, make it reasonable to conclude that this facility is contributing to nutrients and sediment observed during monitoring. This information and the combination of recent failing BURP scores and instantaneous low flow TP concentrations that are an order of magnitude higher than other creeks in the area lead to the recommendation that Bellgrove Creek be listed on Idaho's 2010 Integrated Report for impairment of the Cold Water Aquatic Life beneficial use due to E. coli, TP and sediment.

ID17010303PN007_06	Coeur d'Alene River - Latour Creek to mouth	29.41	MILES

Cadmium

Lead

Sedimentation/Siltation

Temperature, water

Zinc

ID17010303PN009L_0L	Black Lake	375.59	ACRES

Cause Unknown

Nutrients Suspected Impairment

ID17010303PN015_02	Latour Creek - source to mouth	50.43	MILES

Temperature, water

ID17010303PN016_06	Coeur d'Alene River - South Fork Coeur d'Alene River to Lato	8.28	MILES

Cadmium

Lead

Temperature, water

Zinc

ID17010303PN020_02	Fourth of July Creek - source to mouth	31.87	MILES

Temperature, water

This AU was assessed on 1/129/2010 by CDA RO Staff (R. Steed, K. Keith,). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Temperature data in this AU exceeded Idaho water quality standards for CWAL criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

2010 Integrated Report: Category 5 (§303(d))

ID17010303PN020_03	Fourth of July Creek - source to mouth	5.12	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Temperature data in this AU exceeded Idaho water quality standards for CWAL criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL .

ID17010303PN021_02	Rose Lake - Stream Order 1 & 2	8.17	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN022_02	Tributaries to Killarney Lake	17.67	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN022L_0L	Killarney Lake	499.15	ACRES

Mercury

2/18/2010 (NED)- Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.433 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported.

ID17010303PN024_02	Cottonwood Creek	9.8	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN026_02	Carlin Creek - source to mouth	16.88	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN028_02	Beauty Creek - source to mouth	11.59	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN028_03	Beauty Creek - source to mouth	2.62	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN029_02	Wolf Lodge Creek - source to mouth	23.78	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN029_03	Wolf Lodge Creek - source to mouth	5.74	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN030_02	Cedar Creek - source to mouth	24.92	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN030_03	Cedar Creek - source to mouth	1.46	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN031_02	Marie Creek - source to mouth	19.67	MILES

Temperature, water

This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010303PN033_03	Fernan Lake	341	ACRES

Nutrient/Eutrophication Biological Indicators

The 2000 Subbasin Assessment reported no violations of nutrient water quality standards; however, it suggested an advisory TMDL for the lake based on annual algal blooms. At the time of the Assessment, the generally accepted total phosphorus criterion for nuisance weed growth in lakes was 25 ug/L (USEPA, 1972). On July 23rd, an algal bloom in Fernan Lake occurred and water samples were collected for identification of the algae and photographs were taken for documentation. A sample was taken at the public boat ramp at the south end of the lake and the northeast end of the lake where algae were very concentrated. Laboratory results confirmed the presence of a blue-green algae bloom at the sample site. On the northeast end of the lake, the bloom consisted of Gloeotrichia echinulata in high density (5.5 colonies/ml, or tens of thousands cells/ml). There were small number of other blue-green taxa including microcystis, anabaena, gomphosphaeria, and aphanothecae. None of them exceeded more than a few thousand cells/ml. The algae bloom at the boat ramp consisted primarily of Microcystis aeruginosa, with just over 16,000 cells/ml. This is well below the WHO criteria for an advisory.

Comment added on 5/21/2008 by KK and TC

ID17010303PN034_02	Fernan Creek - source to Fernan Lake	15.57	MILES

Temperature, water

Temperature was added by EPA in 1998.

ID17010303PN034_03	Fernan Creek - source to Fernan Lake	3.14	MILES

Temperature, water

Temperature was added by EPA in 1998.

17010304 St. Joe

ID17010304PN009_02	John Creek - source to mouth	28.37	MILES

Temperature, water

ID17010304PN013_02	Tyson Creek - headwaters to mouth	14.15	MILES

Benthic-Macroinvertebrate Bioassessments

ID17010304PN013_03	Tyson Creek - source to mouth	2.14	MILES

Escherichia coli

Temperature, water

ID17010304PN014_02	Carpenter Creek - source to mouth	27.55	MILES

Temperature, water

11/17/2009 Robert Steed; Temperature added to cause for impairment of Salmonid Spawning. The basis for this cause is personal discussion with T. Clyne.

ID17010304PN014_03	Carpenter Creek - source to mouth	1.02	MILES

Temperature, water

ID17010304PN019_03	Gold Center Creek - source to mouth	2.16	MILES

Benthic-Macroinvertebrate Bioassessments

ID17010304PN020_03	Merry Creek - source to mouth	5.13	MILES

Temperature, water

ID17010304PN022_02	Olson Creek - source to mouth	12.76	MILES

Temperature, water

ID17010304PN024_03	Renfro Creek - locally known as Davis Cr	1.22	MILES

Escherichia coli

ID17010304PN026_02	Thorn Creek - upper	35.2	MILES

Temperature, water

ID17010304PN026_03	Thorn Creek - lower	1.91	MILES

Temperature, water

16 June 2006 - The cause "pollutant unidentified" has been replaced with "temperature". 2002 temperature logger data (2002SCDATL0003) show that salmonid spawning criteria are exceeded between 45% and 100% of the period of record (June 16, 2002 to Sept. 30, 2002). R. Steed

ID17010304PN027_05	St. Joe River - North Fork St. Joe River to St. Maries River	51.8	MILES

Temperature, water

ID17010304PN031_04	Marble Creek - Hobo Creek to mouth	11.83	MILES

Temperature, water

ID17010304PN041_02	Numerous tribs to St. Joe R- Headwaters to NF St. Joe River	146.18	MILES

Temperature, water

ID17010304PN041_02a	Sherlock Creek	2.17	MILES

Sedimentation/Siltation

ID17010304PN041_03	St. Joe River - source to North Fork St. Joe River	5.75	MILES

Temperature, water

ID17010304PN062_03	Slate Creek - source to mouth	14.49	MILES

Temperature, water

ID17010304PN063_02	Big Creek - source to mouth	46.31	MILES

Temperature, water

ID17010304PN063_03	Big Creek - source to mouth	11.62	MILES

Benthic-Macroinvertebrate Bioassessments

Temperature, water

17010305 Upper Spokane

ID17010305PN002_02	Cable Creek - source to Idaho/Washington border	10.58	MILES

Escherichia coli

ID17010305PN003_04	Spokane River - Post Falls Dam to Idaho/Washington border	5.67	MILES

Cadmium

Lead

Zinc

Phosphorus (Total)

ID17010305PN004_04	Spokane River - Coeur d'Alene Lake to Post Falls Dam	8.87	MILES

Cadmium

Lead

Zinc

Phosphorus (Total)

ID17010305PN008_02	Mokins Creek - source to mouth	7.82	MILES

Temperature, water

2010: Mokins Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010305PN009_02	Nilsen Creek - source to mouth	3.08	MILES

Temperature, water

2010: Nilsen Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010305PN010_02	Tributaries to Hayden Creek	35.24	MILES

Temperature, water

2010: Stump Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010305PN010_03	Hayden Creek -source to mouth	5.04	MILES

Temperature, water

2010: Hayden Creek. This AU was assessed on 1/19/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg). Temperature data were submitted by U.S. Forest Service, Idaho Panhandle National Forests, Coeur d'Alene River Ranger District as response to DEQ request for data. These data were assessed as Tier 1 by K. Stromberg and K. Duncan (DEQ intern) in 2009. The analysis can be found in a report attached and data are available at CDA Regional Office and on the Regional Office Shared Drive G:WATRQUAL\INTEGRATED REPORT\Data and Documentation for 2010. Salmonid spawning as existing beneficial use was confirmed by USFS staff. Temperature data in this AU exceeded Idaho water quality standards for salmonid spawning criteria. Based on WBAGII, we concluded this AU not fully supporting for CWAL and SS.

ID17010305PN011_02	Sage Creek and Lewellen Creek - source to mouth	35.72	MILES

Combined Biota/Habitat Bioassessments

ID17010305PN012_03	Rathdrum Creek - Twin Lakes to mouth	3.47	MILES

Combined Biota/Habitat Bioassessments

This AU was assessed on 1/7/2010 by CDA RO Staff (R. Steed) This AU was previously assessed as CWAL and SCR in the "FS" category. The 2008 BURP ALUS suggests "NFS". Assessment was performed following the WBAG II protocol, and this AU is in the Not Full Support category for CWAL and in the Full Support category for SCR. The cause of impairment is unknown at this time and a Stressor Identification study should be conducted.

ID17010305PN017_02	Lost Lake, Howell, and Lost Creeks - source to mouth	13.28	MILES

Escherichia coli

2010: This Assessment unit was assessed on 1/29/2010 by CDA RO Staff (R. Steed). 2006 BURP Escherichia coli sample exceed Idaho Water Quality Standards numeric criteria. Geomean = 293 cfu/100mL

Combined Biota/Habitat Bioassessments

2010: This AU was assessed on 1/7/2010 by CDA RO Staff (R. Steed) This AU was previously unassessed. The 2006 BURP ALUS suggests "NFS". Assessment was performed following the WBAG II protocol, and this AU is in the Not Full Support category for CWAL and in the Full Support category for SCR. The cause of impairment is unknown at this time and a Stressor Identification study should be conducted.

ID17010305PN018_02	Hauser Creek - upper	15.34	MILES

Escherichia coli

2010: Right Fork Hauser Creek AU was assessed on 1/7/2010 by CDA RO Staff (R. Steed) This AU was previously NFS for PCR. The 2006 BURP ALUS suggests "NFS". Assessment was performed following the WBAG II protocol, and this AU is in the Full Support category for CWAL and remains in the Not Full Support category for PCR. The cause of impairment remains e. coli. MST monitoring during summer of 2009 by Coeur d' Alene Regional Office confirms high bacteria counts.

ID17010305PN018_03	Hauser Creek - lower, mainstem portion	2.65	MILES

Escherichia coli

Salmon

2010 Integrated Report: Category 5 (§303(d))

17060101 Hells Canyon

ID17060101SL003_08	Snake River - Hells Canyon Dam to Sheep Creek	17.93	MILES

Oxygen, Dissolved

ID17060101SL004_03	Deep Creek - 3rd order (Lake Creek to mouth)	6.78	MILES

Sedimentation/Siltation

pH

Cause Unknown — Metals Suspected Impairment

17060103 Lower Snake-Asotin

ID17060103SL001_08	Snake River - Asotin Creek (Idaho/Oregon border) to Lower Gr	6.26	MILES

Temperature, water — Added 3/27/2006

ID17060103SL004_08	Snake River - Salmon River to Cottonwood Creek	7.12	MILES

Temperature, water — Added 3/27/2006

ID17060103SL014_02	Tammany Creek - WBID 015 to unnamed tributary	14.56	MILES

Escherichia coli

Nutrient/Eutrophication Biological Indicators

ID17060103SL014_03	Tammany Creek - Unnamed Tributary to mouth	4.27	MILES

Escherichia coli

Nutrient/Eutrophication Biological Indicators

ID17060103SL016_02	Tammany Creek - source to Unnamed Tributary (T34N, R05W	18.64	MILES

Escherichia coli

Nutrient/Eutrophication Biological Indicators

17060201 Upper Salmon

ID17060201SL001_02	Salmon River - Pennal Gulch to Pahsimeroi River	93.32	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17060201SL007_04	Challis Creek - Darling Creek to mouth	3.42	MILES

Temperature, water

ID17060201SL009_04	Challis Creek - Bear Creek to Darling Creek	1.5	MILES

Temperature, water

Cause Unknown — Nutrients Suspected Impairment

ID17060201SL015_03	Garden Creek - source to mouth	3.92	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients suspected impairment.

ID17060201SL015_04	Garden Creek - source to mouth	8.82	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients suspected impairment.

ID17060201SL023_04	Squaw Creek - confluence of Aspen and Cinnabar Creeks to	0.49	MILES

Temperature, water — Added 3/27/2006

ID17060201SL024_02	Aspen Creek - source to mouth	51.69	MILES

Temperature, water — Added 3/27/2006

ID17060201SL024_03	Aspen Creek - source to mouth	6.01	MILES

Temperature, water — Added 3/27/2006

ID17060201SL024_04	Aspen Creek - source to mouth	2.46	MILES

Temperature, water — Added 3/27/2006

ID17060201SL026_02	Bruno Creek - source to mouth	8.78	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL027_05	Salmon River - Thompson Creek to Squaw Creek	4.4	MILES

Sedimentation/Siltation

Temperature, water

ID17060201SL047_05	Salmon River - Valley Creek to Yankee Fork Creek	5.39	MILES

Sedimentation/Siltation

Temperature, water

ID17060201SL048_03	Basin Creek - East Basin Creek to mouth	2.36	MILES

Sedimentation/Siltation

ID17060201SL051_02	Valley Creek - Trap Creek to mouth	30.01	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL056_02	Meadow Creek - source to mouth	4.4	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL063_05	Salmon River - Redfish Lake Creek to Valley Creek	9.14	MILES

Sedimentation/Siltation

Temperature, water

ID17060201SL072_05	Salmon River - Fisher Creek to Decker Creek	8.39	MILES

Sedimentation/Siltation

ID17060201SL075_02	Alturas Lake Creek - Alturas Lake to mouth	14.44	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL086_03	Champion Creek - source to mouth	5.62	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL089_02	Williams Creek - source to mouth	12.88	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL099_02	Slate Creek - source to mouth	37.05	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL103_02	East Fork Salmon River - Germania Creek to Herd Creek	59.92	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL104_03	Big Lake Creek - source to mouth	2.3	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL125_03	Road Creek - source to Corral Basin Creek	2.9	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL126_02	Mosquito Creek - source to mouth	12.42	MILES

Combined Biota/Habitat Bioassessments

ID17060201SL131_04	Warm Spring Creek - Hole-in-Rock Creek to mouth	4.66	MILES

Sedimentation/Siltation

ID17060201SL132_02	Warm Spring Creek - source to Hole-in-Rock Creek	104.66	MILES

Sedimentation/Siltation

ID17060201SL132_03	Warm Spring Creek - source to Hole-in-Rock Creek	5.07	MILES

Sedimentation/Siltation

ID17060201SL132_04	Warm Spring Creek - source to Hole-in-Rock Creek	6.71	MILES

Sedimentation/Siltation

ID17060201SL133_02	Broken Wagon Creek - source to mouth	44.79	MILES

Sedimentation/Siltation

ID17060201SL133_03	Broken Wagon Creek - source to mouth	3.17	MILES

Sedimentation/Siltation

17060202 Pahsimeroi

ID17060202SL002_02	Pahsimeroi River - Meadow Creek to Patterson Creek	50.12	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

Temperature, water

Fecal Coliform

ID17060202SL002_04	Pahsimeroi River - Meadow Creek to Patterson Creek	3.04	MILES

Particle distribution (Embeddedness)

ID17060202SL002_05	Pahsimeroi River - Meadow Creek to Patterson Creek	10.21	MILES

Temperature, water

Cause Unknown — Nutrients Suspected Impairment

ID17060202SL003_03	Lawson Creek - confluence of North and South Fork Lawson	1.82	MILES

Combined Biota/Habitat Bioassessments

ID17060202SL004_02	North Fork Lawson Creek - source to mouth	11.83	MILES

Combined Biota/Habitat Bioassessments

ID17060202SL005_02	South Fork Lawson Creek - source to mouth	11.91	MILES

Combined Biota/Habitat Bioassessments

ID17060202SL006_02	Meadow Creek - source to mouth	28.51	MILES

Combined Biota/Habitat Bioassessments

Fecal Coliform

ID17060202SL007_04	Pahsimeroi River - Furley Road (T15S, R22E) to Meadow Cre	1.56	MILES

Cause Unknown — Nutrients Suspected Impairment

ID17060202SL009_02	Grouse Creek - source to mouth	35.96	MILES

Combined Biota/Habitat Bioassessments

ID17060202SL010_03	Pahsimeroi River - Goldburg Creek to Big Creek	5.32	MILES

Cause Unknown — Nutrients Suspected Impairment

ID17060202SL010_04	Pahsimeroi River - Goldburg Creek to Big Creek	6.64	MILES

Cause Unknown — Nutrients Suspected Impairment

ID17060202SL010_05	Pahsimeroi River - Goldburg Creek to Big Creek	0.1	MILES

Cause Unknown — Nutrients Suspected Impairment

ID17060202SL011_04	Pahsimeroi River - Unnamed Tributary (T12N, R23E, Sec. 22)	2.54	MILES

Cause Unknown — Nutrients Suspected Impairment

ID17060202SL017_04	Pahsimeroi River - Burnt Creek to Unnamed Tributary (T12N,	10.34	MILES

Cause Unknown — Nutrients Suspected Impairment

ID17060202SL023_03	Burnt Creek - Long Creek to mouth	5.06	MILES

Combined Biota/Habitat Bioassessments

ID17060202SL026_02	Short Creek - source to mouth	5.83	MILES

Combined Biota/Habitat Bioassessments

ID17060202SL029_02	Donkey Creek -source to mouth	13.56	MILES

Combined Biota/Habitat Bioassessments

ID17060202SL030_02	Goldburg Creek - source to Donkey Creek	37.62	MILES

Fecal Coliform

ID17060202SL031_03	Big Creek - confluence of North and South Fork Big Creeks to	13.56	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment

17060203 Middle Salmon-Panther

ID17060203SL005_03	Big Deer Creek - South Fork Big Deer Creek to mouth	2.98	MILES

Copper — This stream is impacted by the Blackbird Mine. It is actively being remediated but still exhibits exceedances of the copper standard.
Data can be reviewed by contacting the Blackbird Mine Project officer at the Idaho Falls regional DEQ office at 208.528.2650

ID17060203SL007_02	South Fork Big Deer Creek - Bucktail Creek to mouth	0.52	MILES

Copper — This AU is impacted by the Blackbird Mine. Dissolved Copper concentrations average 39 ppb. Being actively remediated through a CERCLA action.

ID17060203SL010_05	Panther Creek - Napias Creek to Big Deer Creek	6.08	MILES

Copper — This stream is impacted by the Blackbird Mine and is being actively remediated.
Data supporting this listing can be reviewed by contacting the Idaho Falls Regional DEQ office at 208.528.2650

ID17060203SL011_02	Panther Creek - Blackbird Creek to Napias Creek	6.97	MILES

Combined Biota/Habitat Bioassessments

ID17060203SL011_04	Panther Creek - Blackbird Creek to Napias Creek	5.5	MILES

Copper

ID17060203SL027_02	Trail Creek - source to mouth	9.49	MILES

Combined Biota/Habitat Bioassessments

ID17060203SL039_07	Salmon River - Carmen Creek to North Fork Salmon River	16.81	MILES

Cause Unknown

ID17060203SL040_02	Wallace Creek - source to mouth	7.93	MILES

Sedimentation/Siltation

Temperature, water

ID17060203SL041_07	Salmon River - Pollard Creek to Carmen Creek	5.95	MILES

Cause Unknown

ID17060203SL042_02	Salmon River - Williams Creek to Pollard Creek	48.88	MILES

Combined Biota/Habitat Bioassessments

ID17060203SL042_07	Salmon River - Williams Creek to Pollard Creek	8.81	MILES

Cause Unknown

ID17060203SL046_06	Salmon River - Twelvemile Creek to Williams Creek	6.43	MILES

Cause Unknown

ID17060203SL047_06	Salmon River - Iron Creek to Twelvemile Creek	12.6	MILES

Cause Unknown

ID17060203SL053_06	Salmon River - Pahsimeroi River to Iron Creek	9.12	MILES

Cause Unknown

ID17060203SL055_02	Cow Creek - source to mouth	27.28	MILES

Combined Biota/Habitat Bioassessments

17060204 Lemhi

ID17060204SL001_06	Lemhi River - Kenney Creek to mouth	24.63	MILES

Temperature, water

Total Coliform

ID17060204SL007a_03	McDevitt Creek - diversion (T19N, R23E, Sec. 36) to mouth	2.35	MILES

Low flow alterations

ID17060204SL026a_02	Mill Creek - diversion (T16N, R24E, Sec. 22) to mouth	10.41	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment

ID17060204SL027_02	Walter Creek - source to mouth	7.84	MILES

Combined Biota/Habitat Bioassessments

ID17060204SL030_04	Lemhi River - confluence of Eighteenmile Creek and Texas Cr	6.56	MILES

Temperature, water

ID17060204SL030_05	Lemhi River - confluence of Eighteenmile Creek and Texas Cr	10.39	MILES

Temperature, water

ID17060204SL036_03	Texas Creek	14.93	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

Fecal Coliform

ID17060204SL041_04	Eighteenmile Creek - Hawley Creek to mouth	2.21	MILES

Temperature, water — Added 3/27/2006

ID17060204SL042_03	Eighteenmile Creek - Clear Creek to Hawley Creek	8.39	MILES

Temperature, water

Added 3/27/2006

ID17060204SL043_03	Eighteenmile Creek - Divide Creek to Hawley Creek	5.96	MILES

Fishes Bioassessments

Temperature, water

Added 3/27/2006

ID17060204SL045_02	Eighteenmile Creek - source to Divide Creek	29.68	MILES

Combined Biota/Habitat Bioassessments

ID17060204SL050a_03	Hawley Creek - diversion (T15N, R27E, Sec. 03) to mouth	2.2	MILES

Cause Unknown — Nutrients Suspected Impairment

ID17060204SL051b_02	Canyon Creek - source to diversion (T16N, R26E, Sec.22)	70.11	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17060204SL052a_02	Little Eightmile Creek - diversion (T16N, R25E, Sec. 02) to	0.43	MILES

Temperature, water — Added 3/27/2006

ID17060204SL052b_02	Little Eightmile Creek - source to diversion (T16N, R25E, Se	25.33	MILES

Temperature, water — Added 3/27/2006

ID17060204SL062b_02	Sandy Creek - source to diversion (T20N, R24E, Sec. 17)	12.33	MILES

Temperature, water — Added 3/27/2006

ID17060204SL064a_02	Bohannon Creek - diversion (T21N, R23E, Sec. 22) to mouth	1.36	MILES

Temperature, water — Added 3/27/2006

ID17060204SL064b_02	Bohannon Creek - source to diversion (T21N, R23E, Sec. 22)	13.58	MILES

Temperature, water — Added 3/27/2006

17060205 Upper Middle Fork Salmon

ID17060205SL012_04	Bear Valley Creek - 4th order (Cache Creek to Elk Creek)	7.36	MILES

Sedimentation/Siltation

ID17060205SL012_05	Bear Valley Creek - 5th order	11.24	MILES

Temperature, water

17060208 South Fork Salmon

ID17060208SL005_02	Secesh River - 1st and 2nd order tributaries	146.86	MILES

Temperature, water — Bull Trout Temperature Standard violated

ID17060208SL023_03	East Fork South Fork Salmon River - 3rd order	2.48	MILES

Combined Biota/Habitat Bioassessments

ID17060208SL023_05	East Fork South Fork Salmon River - 5th order	14.46	MILES

Sedimentation/Siltation — This AU was not addressed by the South Fork Salmon Sediment TMDL. That TMDL addresses PNRS# 918, 919, & 920.

ID17060208SL025_02	Upper Johnson Creek and tributaries - 1st and 2nd order	70.58	MILES

Combined Biota/Habitat Bioassessments — 4/8/2011 (NED) - Due to BURP sites 2006SBOIA043 and 2006SBOIA044 having an index score (SFI) below minimum threshold levels, DEQ automatically determines the water body as not fully supporting.

ID17060208SL025_04	Johnson Creek - 4th order	13.09	MILES

Temperature, water

17060209 Lower Salmon

ID17060209SL008_07	Salmon River - Slate Creek to Rice Creek	27.88	MILES

Mercury

The Me-Hg human health criterion is protective of aquatic life. Since Idaho is relying on the Me-Hg criterion to protect aquatic life, for 303(d) listing purposes, if human health use is impaired aquatic life use will be assumed to be impaired as well. (2008 Integrated Principals & Policies Document page 27).

The value of 0.3 mg Me-Hg per Kg of fish tissue (wet weight) is set at a level to protect the general public from adverse effects during a lifetime of exposure. The Section 5 (303(d)) listing for this assessment unit is based on USGS methyl Hg data USGS (2004-2007) single species 10 fish composite samples. Results are 0.4 mg Me-Hg/Kg.

The data were evaluated following the 2008 Integrated Report Principals & Policies Document; page 28 for recreational use and aquatic life use impairment.

ID17060209SL057_02	John's Creek - 1st and 2nd order tributaries	44.3	MILES

Combined Biota/Habitat Bioassessments

Analysis of the dominant benthic macroinvertebrate community from a 2008 BURP survey within John's Creek identified pollutant tolerant taxa that are able to occupy habitats with low dissolved oxygen and high nutrient concentrations. Additionally, visible slime growths were observed during site visits, and nuisance vegetation growths are occurring in stream. This implies that impairment to the cold water aquatic life beneficial use may be a result of excessive nutrient loading. Lack of nutrient data restricts the abilitiy to adequately calculate loads and any necessary load reductions. Therefore it is recommended that John's Creek be listed in Seciton 5 of the 2010 Integrated Report for nutrients (page xxiv). CB 3/10

ID17060209SL062_03w	Deer Creek - upstream from waterfall	4.52	MILES

Sedimentation/Siltation

17060210 Little Salmon

ID17060210SL007_04a	West Branch Goose Creek	4.38	MILES

Combined Biota/Habitat Bioassessments

ID17060210SL008_03	Mud and Little Mud Creeks - 3rd order	8.13	MILES

Benthic-Macroinvertebrate Bioassessments

ID17060210SL010_04	East Branch Goose Creek and 4th order section of Goose Cre	5.45	MILES

Combined Biota/Habitat Bioassessments

Southwest

17050101 C. J. Strike Reservoir

ID17050101SW003_03	Browns Creek - 3rd order	4.21	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring.

ID17050101SW003_04	Browns Creek - 4th order	4.05	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring.

ID17050101SW004_02	Browns Creek - 1st and 2nd order tributaries	63.59	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050101SW004_03	Browns Creek - 3rd order	15.76	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050101SW006_02	Sailor Creek - 1st and 2nd order	265.97	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050101SW006_03	Sailor Creek - 3rd order	33.38	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050101SW006_04	Sailor Creek - 4th order	22.85	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050101SW008_02	Deadman Creek - 1st and 2nd order	92.72	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050101SW008_03	Deadman Creek - 3rd order	38.44	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050101SW010_03	King Hill Creek - 3rd order (West Fork to mouth)	11.57	MILES

Combined Biota/Habitat Bioassessments

ID17050101SW011_02	West Fork King Hill Creek - entire drainage	29.42	MILES

Temperature, water

ID17050101SW024_03	Long Tom Creek - 3rd order	10.5	MILES

Combined Biota/Habitat Bioassessments

17050102 Bruneau

ID17050102SW002_05	Jacks Creek - 5th order (Little Jacks Creek to mouth)	12.28	MILES

Temperature, water

ID17050102SW004_04	Big Jacks Creek - 4th order (Dry Canyon to Duncan Creek)	7.35	MILES

Sedimentation/Siltation

ID17050102SW004_05	Big Jacks Creek - upper 5th order	24.09	MILES

Combined Biota/Habitat Bioassessments

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ID17050102SW009_06	Bruneau River - 6th order (Hot Creek to mouth)	16.92	MILES

Temperature, water

Listed based on Bruneau River TMDL page 3. HS

ID17050102SW014_04	Sheep Creek - 4th order	25.5	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW015_02L	Grasmere Reservoir	114.37	ACRES

Mercury

2/16/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.319 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17050102SW016_02	Marys Creek - 1st and 2nd order	134.81	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW016_04	Marys Creek - 4th order	35.01	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW017_02	Bull Creek - 1st and 2nd order tributaries	29.48	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW018_02	Pole Creek - 1st and 2nd order	32.99	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW019_02	Cat Creek - 1st and 2nd order	17.79	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW022_02	Cougar Creek - 1st and 2nd order	40.77	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. However, EPA's public comments (2008 and 2010) said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring 2011 monitoring. Hawk Stone

ID17050102SW022_03	Cougar Creek - 3rd order	20.01	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. However, EPA's public comments (2008 and 2010) said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring 2011 monitoring. Hawk Stone.

ID17050102SW023_02	Dorsey Creek - 1st and 2nd order	33.22	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW025_02	Poison Creek - 1st and 2nd order section	60.67	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. However, EPA's public comments (2008 and 2010) said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring 2011 monitoring. Hawk Stone.

ID17050102SW025_03	Poison Creek - 3rd order	16.66	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. However, EPA's public comments (2008 and 2010) said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring 2011 monitoring. Hawk Stone.

ID17050102SW028_04	Clover Creek - 4th order (Deadwood Creek to Buck Flat Draw)	29.63	MILES

Temperature, water

This was part of EPA's 1998 303(d) list temperature addition. Hawk 2/1/10

ID17050102SW028_05	Clover Creek (East Fork Bruneau River) - 5th order	24.74	MILES

Temperature, water

ID17050102SW030_02	Big Flat Creek - 1st and 2nd order	48.72	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW033_03	Deer Creek - 3rd order	5.23	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW034_02	Deadwood Creek - 1st and 2nd order	28.12	MILES

Combined Biota/Habitat Bioassessments

ID17050102SW035_04	Buck Flat Draw - 4th order	10.21	MILES

Temperature, water

This assessment unit was delisted for temperature, because it is intermittent. However, EPA's 2010 public comments said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for the aforementioned causes, pending late-spring 2011 monitoring. Hawk Stone.

17050103 Middle Snake-Succor

ID17050103SW000_07	Snake River - State Line to Boise River	4.13	MILES

Temperature, water

ID17050103SW001_07	Snake River - Marsing (RM425) to State Line	17.1	MILES

Temperature, water

From 2004 TMDL, page 70:

The Snake River is designated for cold water aquatic life, but supports a primarily warm and
cool water fishery. Elevated temperatures above the cold water aquatic life temperature standard are typically observed in July and August. The maximum weekly average temperature during the first week of August 1997 was 23 ℃.
Figure 2.4 July 14, 2002: Fish kill on the Snake River at Walters Ferry
In 1992, a drought year, an instantaneous maximum of 29 ℃ was reached downstream of
Swan Falls Dam. In early July 2002, following several days of extremely hot weather, instantaneous temperatures exceeded 26 ℃ below Swan Falls Dam. These temperatures
resulted in a large fish kill of mountain whitefish (Figure 2.4). This event occurred after several days of extremely hot weather and water temperatures >26 degrees Celsius. This picture is not meant to imply that these fish kills occur on an annual basis, nor is it necessarily representative of conditions in the tributaries to the Snake River. Whitefish are
subject to lethal effects at temperatures above 26 ℃. An Idaho Power study on the habitat of
the Snake River Plain states that whitefish kills are common in the Swan Falls area in the summer and are primarily due to elevated temperatures. (IPC 2002)
As shown in Figure 2.5, the Snake River exceeds the cold water maximum daily average temperature of 19 ℃ (USGS 2000). The Snake River is proposed for temperature listing on
the §303(d) list. A TMDL is not being written at this time in order to allow time to adequately assess the thermal site potential of the river.

ID17050103SW004_02	McBride Creek - 1st and 2nd order	73.11	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment and temperature, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment and temperature, pending late-spring monitoring. Hawk Stone.

Temperature, water

ID17050103SW004_03	McBride Creek - 3rd order	6.89	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment and temperature, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment and temperature, pending late-spring monitoring. Hawk Stone.

Temperature, water

ID17050103SW006_07	Snake River - C.J. Strike Dam to Castle Creek	23.74	MILES

Temperature, water

From 2004 TMDL, page 70:

The Snake River is designated for cold water aquatic life, but supports a primarily warm and
cool water fishery. Elevated temperatures above the cold water aquatic life temperature standard are typically observed in July and August. The maximum weekly average temperature during the first week of August 1997 was 23 °C.
Figure 2.4 July 14, 2002: Fish kill on the Snake River at Walters Ferry
In 1992, a drought year, an instantaneous maximum of 29 °C was reached downstream of
Swan Falls Dam. In early July 2002, following several days of extremely hot weather, instantaneous temperatures exceeded 26 °C below Swan Falls Dam. These temperatures
resulted in a large fish kill of mountain whitefish (Figure 2.4). This event occurred after several days of extremely hot weather and water temperatures >26 degrees Celsius. This picture is not meant to imply that these fish kills occur on an annual basis, nor is it necessarily representative of conditions in the tributaries to the Snake River. Whitefish are
subject to lethal effects at temperatures above 26 °C. An Idaho Power study on the habitat of
the Snake River Plain states that whitefish kills are common in the Swan Falls area in the summer and are primarily due to elevated temperatures. (IPC 2002)
As shown in Figure 2.5, the Snake River exceeds the cold water maximum daily average temperature of 19 °C (USGS 2000). The Snake River is proposed for temperature listing on
the §303(d) list. A TMDL is not being written at this time in order to allow time to adequately assess the thermal site potential of the river.

ID17050103SW006_07b	Snake River - Swan Falls to Marsing (RM425)	35.2	MILES

Temperature, water

ID17050103SW008_02	Hardtrigger Creek - entire drainage	23.03	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW009_03	Reynolds, Salmon and Wilson Creeks - 3rd order segments	17.12	MILES

Escherichia coli

Stream listed because of 5 e-coli results: 948.8, 162.4, 76.6, 45.5, 125.9. Taken over a one-month period on different days.

ID17050103SW009_04	Reynolds Creek - 4th order (Salmon Creek to Snake River)	11.85	MILES

Combined Biota/Habitat Bioassessments

ID17050103SW016_02	Pickett Creek - 1st & 2nd order	27.53	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment and temperature, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment and temperature, pending late-spring monitoring. Hawk Stone.

Temperature, water

ID17050103SW016_03	Pickett Creek - 3rd order	6.43	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW019_02	Brown Creek - 1st & 2nd order	79.81	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW019_03	Brown Creek - 3rd order	7.64	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW019_04	Brown Creek - 4th order	6.43	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW021_02	Birch Creek and tributaries - 1st and 2nd order	65.99	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW021_03	Birch Creek - 3rd order	15.12	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW021_04	Birch Creek - 4th order	2.7	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW023_03	Vinson Wash - 3rd order	7.91	MILES

Combined Biota/Habitat Bioassessments

ID17050103SW024_03	Shoofly and Poison Creeks - 3rd order	28.47	MILES

Sedimentation/Siltation

ID17050103SW025_02	Corder Creek - 1st and 2nd order	67.39	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050103SW026_02	Rabbit Creek - 1st and 2nd order	12.99	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

17050104 Upper Owyhee

ID17050104SW005L_0L	Juniper Basin Reservoir	242.16	ACRES

Escherichia coli

ID17050104SW012_03	Little Blue Creek - 3rd order	5.83	MILES

Combined Biota/Habitat Bioassessments

ID17050104SW014_02L	Shoofly Reservoir	87.82	ACRES

Mercury — 2/16/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.502 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17050104SW023_02	Battle Creek - 1st & 2nd order	259.54	MILES

Temperature, water

ID17050104SW023_03	Battle Creek - 3rd order	36.76	MILES

Temperature, water

ID17050104SW023_04	Battle Creek - 4th order	29.46	MILES

Temperature, water

ID17050104SW024_02	Dry Creek - entire drainage except reservoir	27.03	MILES

Combined Biota/Habitat Bioassessments

ID17050104SW025_03	Big Springs Creek - 3rd order	3.99	MILES

Combined Biota/Habitat Bioassessments

ID17050104SW029_03	Camas Creek - 3rd order	7.31	MILES

Temperature, water

ID17050104SW030_02	Camel Creek - 1st and 2nd order	28.58	MILES

Temperature, water — Impairment is caused by temperature. The 2003 TMDL cites BLM data that indicate exceedence.

ID17050104SW031_02	Nickel Creek & tributaries - 1st and 2nd order	77.01	MILES

Temperature, water

ID17050104SW031_03	Nickel, Thomas & Smith Creeks - 3rd order sections	9.7	MILES

Temperature, water

Aquatic Plant Bioassessments — The 2003 TMDL used an analysis of periphyton to conclude that this creek may be impaired by metals.

ID17050104SW033_02	Beaver Creek - 1st and 2nd order	47.55	MILES

Combined Biota/Habitat Bioassessments

ID17050104SW033_03	Beaver Creek - 3rd order	3.7	MILES

Temperature, water

Although there is indication that temperature is a pollutant of concern, there may be other pollutants impairing the beneficial uses. However, the temperature loading analysis for Beaver
Creek as presented in Section 5.0 could be utilized as the basic framework for analysis. Additional information is required to determine possible other pollutants of concern. Beaver
Creek will be added as a Water Quality Limited Segment on the next Idaho DEQ §303(d) list.

ID17050104SW033_04	Beaver Creek - 4th order	2.57	MILES

Temperature, water

Although there is indication that temperature is a pollutant of concern, there may be other pollutants impairing the beneficial uses. However, the temperature loading analysis for Beaver
Creek as presented in Section 5.0 could be utilized as the basic framework for analysis. Additional information is required to determine possible other pollutants of concern. Beaver
Creek will be added as a Water Quality Limited Segment on the next Idaho DEQ §303(d) list.

17050108 Jordan

ID17050108SW001_05	Jordan Creek - Williams Creek to State Line	13.35	MILES

Temperature, water

From the Jordan Creek TMDL, page xxx:

"Temperature data for the lower Jordan Creek segments shows exceedance of both the maximum daily average temperature and the maximum daily maximum temperature. A Potential Natural Vegetation Temperature TMDL will be completed."

ID17050108SW002_02	Lone Tree Creek and tributaries - 1st and 2nd order	29.23	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17050108SW004_02	Upper Jordan Creek - 1st and 2nd order tributaries	102.44	MILES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Analysis of Total Mercury Concentrations in Fish Samples from Jordan Creek and Non-Jordan Creek Sites" (Xin Dai and Michael Ingham, Revised November 2009). A Mercury level of 0.551 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

Temperature, water

From the Jordan Creek TMDL:

"Temperature data provided by BLM showed one site with continuous temperature data that
exceeded the maximum daily maximum temperature of 22 degrees C on 22% of the dates. A
Potential Natural Vegetation Temperature TMDL will be completed."

HS

ID17050108SW004_03	Jordan Creek - 3rd order (Jacobs Gulch to Louse Creek)	13.43	MILES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Analysis of Total Mercury Concentrations in Fish Samples from Jordan Creek and Non-Jordan Creek Sites" (Xin Dai and Michael Ingham, Revised November 2009). A Mercury level of 0.511 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

Temperature, water

Temperature data provided by BLM showed one site with continuous temperature data that
exceeded the maximum daily maximum temperature of 22 degrees C on 22% of the dates. A
Potential Natural Vegetation Temperature TMDL will be completed

ID17050108SW004_04	Jordan Creek - 4th order (Louse Creek to Big Boulder Creek)	5.64	MILES

Temperature, water

ID17050108SW004_05	Jordan Creek - Big Boulder Creek to Williams Creek	3.37	MILES

Temperature, water

Mercury

ASSESSMENT: Segment and all attributes carried forward from 1998 list

2/18/2010 - Mercury listing based on the DEQ report, "Analysis of Total Mercury Concentrations in Fish Samples from Jordan Creek and Non-Jordan Creek Sites" (Xin Dai and Michael Ingham, Revised November 2009). A Mercury level of 0.590 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17050108SW010_04	Rock Creek - 4th order (Meadow Creek to Josephine Creek)	0.48	MILES

Combined Biota/Habitat Bioassessments

4/18/2011 (NED) - BURP site 2003SBOIA0432 had a SFI score below minimum threshold levels, therefore DEQ automatically determines the water body as not fully supporting.

ID17050108SW013_02	Rock Creek above Triangle Reservoir - 1st and 2nd order	64.23	MILES

Temperature, water

ID17050108SW013_03	Rock Creek above Triangle Reservoir - 3rd order	13.29	MILES

Temperature, water

Temperature standards are exceeded based on temperature data supplied to DEQ by BLM. In 2004, BLM temperature data indicated 32% of the dates exceeded the 22º C maximum daily maximum temperature (MDMT) criteria, and 22% exceeded the 19º C maximum daily average temperature criteria (MDAT).

ID17050108SW014_02	Louisa Creek - entire drainage	13.81	MILES

Sedimentation/Siltation

Temperature, water

ID17050108SW015_02	Spring and Meadow Creeks - 1st and 2nd order	48.83	MILES

Temperature, water

ID17050108SW015_03	Spring and Meadow Creeks - 3rd order sections	8.34	MILES

Temperature, water

ID17050108SW021_02	Cow Creek - 1st and 2nd order	55.12	MILES

Temperature, water

ID17050108SW021_03	Cow Creek - 3rd order (Wildcat Canyon to Soda Creek)	3.42	MILES

Temperature, water

ID17050108SW022_02	Soda, Swisher and Chimney Creeks - 1st and 2nd order	36.92	MILES

Sedimentation/Siltation

Temperature, water

The Jordan Creek TMDL, page xxii, says Soda Creek is 'unlisted but impaired' by temperature. The data source is a BLM temperature logger (page xxv). HS

ID17050108SW022_03	Soda Creek - 3rd order section	3.08	MILES

Sedimentation/Siltation

Temperature, water

The Jordan Creek TMDL, page xxii, says Soda Creek is 'unlisted but impaired' by temperature. The data source is a BLM temperature logger (page xxv). HS

17050111 North And Middle Fork Boise

ID17050111SW001_02b	Montezuma Creek and Quartz Gulch	4.95	MILES

Arsenic

Data were provided by Idaho Conservation League that show the drinking water, and contact recreation standards for Arsenic were violated 85% of the time below a 100m mixing zone on Montezuma Creek.

12/8/09 HS.

Data were provided by Idaho Conservation League that show the drinking water, and contact recreation standards for Arsenic were violated 85% of the time below a 100m mixing zone on Montezuma Creek.
Updated this Assessment Unit to reflect an AU split 12/8/09 HS.

17050112 Boise-Mores

ID17050112SW004_05	Boise River - 5th order (North Fork to Arrowrock)	10.35	MILES

Temperature, water

Listing based on Twin Springs temperature logger data submitted to DEQ by the City of Boise. HS

17050113 South Fork Boise

ID17050113SW002b_04	Willow Creek - 4th order	0.93	MILES

Combined Biota/Habitat Bioassessments

ID17050113SW004_03	Dixie and Deer Creeks - 3rd order sections	9.85	MILES

Combined Biota/Habitat Bioassessments

ID17050113SW005L_0L	Anderson Ranch Reservoir (Boise River)	4607.37	ACRES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.367 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17050113SW010_03a	Moores and Big Springs Creeks - 3rd order sections	4.63	MILES

Combined Biota/Habitat Bioassessments

ID17050113SW031_02	Fall Creek - 1st and 2nd order tributaries	84.25	MILES

Combined Biota/Habitat Bioassessments

ID17050113SW032_03	Smith Creek - 3rd order (Mule Gulch to SF Boise River)	16.45	MILES

Escherichia coli

17050114 Lower Boise

ID17050114SW001_02	Three unnamed drains to Boise River below Indian Creek	4.14	MILES

Temperature, water

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ID17050114SW001_06	Boise River - Indian Creek to mouth	45.43	MILES

Temperature, water

Phosphorus (Total)

2/05/2009 (NED) - Per EPA's Partial Approval/Partial Disapproval of Idaho's Final 2008 303(d) List letter dated 2/04/2009, EPA disapproved delisting of the Lower Boise River for nutrients (total phosphorus) because DEQ did not demonstrate good cause to delist, and that DEQ provided insufficient rationale to justify the exclusion of all existing and readily available data. EPA subsequently took public comment on this reversal that ended May 15, 2009.

5/3/2010 (NED) - EPA concluded in their final decision letter dated October 13, 2009 that the Lower Boise River is water quality-limited and mandated that DEQ add the Lower Boise River back to the 303(d) list. Refer to the following link to review EPA's final determination on the Lower Boise River:
http://www.deq.idaho.gov/media/773615-2008-ir-epa-response-lower-boise-river-hem-creek-101309.pdf

ID17050114SW002_04	Indian Creek - 4th order below 11th Ave. in Nampa	10.93	MILES

Temperature, water

Fecal Coliform

Sedimentation/Siltation

The USGS (2005) and the Idaho State Department of Agriculture (ISDA) (1998-1999) collected water quality data and reported results document sediment ranges from 21 to 89 mg/L (151, 156). Sediment plumes from Indian Creek into the Boise River are visible in satellite images (pg. 35). Data from ISDA sent to DEQ in September 2009, document SSC of 25 to 120 mg/L during the irrigation season.

ID17050114SW003_02	Indian Creek and tributaries - 1st and 2nd order	280.3	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, nutrients and fecal coliform, because it is intermittent. However, EPA's 2010 public comments said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for the aforementioned causes, pending late-spring 2011 monitoring. Hawk Stone.

Fecal Coliform

Nutrient/Eutrophication Biological Indicators

ID17050114SW003_03	Indian, North Indian and Sand Creeks - 3rd order sections	57.21	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, nutrients and temperature, because it is intermittent. However, EPA's 2010 public comments said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for the aforementioned causes, pending late-spring 2011 monitoring. Hawk Stone.

Temperature, water

Nutrient/Eutrophication Biological Indicators

ID17050114SW003_04	Indian and Sand Creeks - 4th order above 11th Ave. in Nampa	27.26	MILES

Temperature, water

ID17050114SW004_06	Lake Lowell	6056.53	ACRES

Phosphorus (Total)

ID17050114SW005_06	Boise River -River Mile 50 to Star Bridge	38.17	MILES

Temperature, water

ID17050114SW005_06a	Boise River-Star to Middleton	11.3	MILES

Temperature, water

Assessment unit listed for temperature impairment based on City of Boise temperature logger data, submitted in the 2010 integrated report call for data. HS

ID17050114SW005_06b	Boise River-Middleton to Indian Creek	7.84	MILES
Phosphorus (Total)			
Temperature, water	Assessment unit listed for temperature impairment based on City of Boise temperature logger data, submitted in the 2010 integrated report call for data. HS		

ID17050114SW006_02	Mason Creek - entire watershed	29.82	MILES
Chlorpyrifos	1/31/10 (HS) - According to the 'Pesticide Residue Water Quality Report', Lower Boise River Tributaries (Kirk Campbell, ISDA, December 2009): "There were eight detections of chlorpyrifos with two of the detections (0.062 ug/L and 0.052 ug/L) exceeding the EPA acute (0.05 ug/L) and chronic (0.04 ug/L) guidance benchmarks for invertebrates. The presence of toxic substances in concentrations that impair beneficial uses is a violation of Idaho's narrative standard for toxic substances.		
Escherichia coli	Data collecte by ISDA in 1998-1999, and 2008 document ranges from 50 to 6,700 cfu/100mL with 40% of all samples > SCR single-sample WQS (pg. 158-159). Data collected in 2005 by USGS document ranges from 340 to 1400 cfu/100 mL, with 75% of all samples > SCR single-sample WQS (pg 150-151). (Susan Beattie)		
Sedimentation/Siltation	In looking at the data, ten years after the TMDL required a 37% reduction, the annual load is increasing and if SSC is interchangeable with turbidity, our turbidity standard is exceeded, at different times, during nine months of the year. (Susan Beattie)		
Cause Unknown	Nutrients suspected impairment.		
Temperature, water	Temperature impairment added based upon data submitted by City of Boise. HS		

ID17050114SW007_04	Fifteenmile Creek - 4th order (Fivemile Creek to mouth)	3.73	MILES
Chlorpyrifos	1/13/2010 (Hawk Stone) - According to the 'Pesticide Residue Water Quality Report', Lower Boise River Tributaries (Kirk Campbell, ISDA, December 2009): "The highest detection of chlorpyrifos (0.053 ug/L) exceeded both the EPA acute (0.05 ug/L) and chronic (0.04 ug/L) guidance benchmarks for invertebrates. Chlorpyrifos also had a detection of 0.044 ug/L, which exceeded the chronic invertebrate benchmark. The presence of toxic substances in concentrations that impair beneficial uses is a violation of Idaho's narrative standard for toxic substances.		
Sedimentation/Siltation	Data collected by USGS in 2005 document SSC between 54 and 97 mg/L (pg. 151). 2008 ISDA data document irrigation season SSC between 28 and 91 mg/L (pg.161-162). Susan Beattie		

ID17050114SW008_03	Tenmile Creek - 3rd order below Blacks Creek Reservoir	29.48	MILES

Sedimentation/Siltation

DEQ attempted to do a Use Attainability Analysis (UAA) in 2002 to establish a modified use for this segment. Tenmile Creek was designated in the Idaho Water Quality Standards for cold water biota and secondary contact recreation. Recognizing that cold water biota and secondary contact recreation may not be appropriate beneficial uses for highly regulated and irrigation driven systems, the lower Boise Watershed Advisory Group commissioned a consultant to perform a beneficial use evaluation for Tenmile Creek to characterize the appropriate beneficial uses and submitted it to DEQ. The analysis showed that a modified aquatic life use accurately defines the best attainable conditions in the stream. The modified aquatic life use describes streams that are limited in aquatic life diversity due to factors such as ephemeral or intermittent flow, naturally occurring pollutant levels or long-standing hydrologic modification.

EPA subsequently disapproved the UAA for modified use and approved the secondary contact recreation change. The comments you reference presume that the UAA was approved and that Tenmile Creek supports uses reflected in the modified category. With this in mind, a sediment TMDL will be prepared based on available resources and given a priority for completion.

Fecal Coliform

Fivemile & Tenmile Creek Subbasin Assessment, page 37

The lower Boise River bacteria TMDL allocated a 95% reduction in fecal coliform concentrations in Fifteenmile Creek to meet bacteria standards in the river (50 CFU/100 ml). The fecal coliform geometric mean at the mouth was 992 CFU/100 ml. Reductions will also have to be made in Fivemile and Tenmile Creek to meet this target. Since the river TMDL was developed, the state of Idaho has moved to an E. Coli bacteria standard, which is a 30-day geometric mean of 126 organisms/100ml for both primary and secondary contact recreation.
Data collected in 1998 and 1999 at Fivemile and Tenmile Creek monitoring locations indicate that during the recreation season (May-August), both streams exceed the E.Coli standard at all locations (Table 8). The data are not represented as a monthly geometric mean, but clearly show that the recreation season concentrations are above the standard.
Table 8. Bacteria concentrations in Fivemile and Tenmile Creek
Location Year (May-Aug) Geo-mean (#/100ml)
T1 (mouth) 1998 650
1999 518
T2 (below Meridian) 1998 757
1999 544
T3 (above Meridian) 1998 687
1999 No Data
F1 (mouth) 1998 779
1999 511
F2 (below Meridian) 1998 581
1999 656
F3 (above Meridian) 1998 516
1999 No Data

ID17050114SW009_02	Blacks Creek and Bryans Run - 1st and 2nd order	56.2	MILES

Combined Biota/Habitat Bioassessments

ID17050114SW009_03	Blacks Creek - 3rd order	7.49	MILES

Combined Biota/Habitat Bioassessments

ID17050114SW010_02	Fivemile Creek - 1st and 2nd order	65	MILES

Fecal Coliform

ID17050114SW010_03	Fivemile Creek - 3rd order	22.64	MILES

Sedimentation/Siltation

Data collected by USGS in 2005 document SSC between 54 and 97 mg/L (pg. 151). 2008 ISDA data document irrigation season SSC between 28 and 91 mg/L (pg.161-162). Susan Beattie

ID17050114SW011a_06	Boise River - Diversion Dam to River Mile 50	22.54	MILES

Temperature, water

Temperature Exceedance

ID17050114SW012_02	Stewart Gulch, Cottonwood and Crane Creeks - 1st & 2nd ord	63.71	MILES

Combined Biota/Habitat Bioassessments

ID17050114SW012_03	Cottonwood Creek - 3rd order (Fivemile Creek to Boise River)	5.94	MILES

Combined Biota/Habitat Bioassessments

ID17050114SW015_02	Willow Creek - 1st and 2nd order	77.72	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17050114SW015_03	Willow Creek - 3rd order	18.36	MILES

Sedimentation/Siltation

USGS collected data in 2005 document SSC from 12 to 24 mg/L, and temperautre from 13.4 to 20.2 *C (pg. 150). City of Boise collected temperature data in 2004 and data in July record temperatures a one-time high of 25.8 *C and on one day (7/19) an average of 23.8 *C. (pg. 265-275), all other days within criteria for MOD (Seasonal COLD). ISDA collected data in 2001 document TSS from 4 to 196 mg/L with an annual average of 34.9 mg/L. This is above the threshold of 20 mg/L identified as supporting COLD uses in the lower Boise TMDL technical appendices (1999). Temperature is documented from 3.2 to 20.4 *C. The data indicate impairment by sediment using the rationale for COLD use support established in the lower Boise TMDL technical appendices and other approved TMDLs.

ID17050114SW016_03	Sand Hollow Creek (C-Line Canal to I-84)	5.58	MILES

Sedimentation/Siltation

Cause Unknown

Nutrients Suspected Impairment□Low DO due to suspected Organic Enrichment

ID17050114SW017_03	Sand Hollow Creek - I-84 to Sharp Road	18.24	MILES

Sedimentation/Siltation

Fecal Coliform

ID17050114SW017_06	Sand Hollow Creek - Sharp Road to Snake River	2.67	MILES

Sedimentation/Siltation

17050120 South Fork Payette

ID17050120SW001_02	SF Payette River - 1st and 2nd order:Lowman to Garden Valle	115.9	MILES

Combined Biota/Habitat Bioassessments

Fishes Bioassessments

Habitat Assessment (Streams)

Cause Unknown

ID17050120SW001_02a	SF Payette River: 1st and 2nd order: Lowman to Grandjean	110.38	MILES

Combined Biota/Habitat Bioassessments

ID17050120SW001_05	South Fork Payette River - 5th order	23.95	MILES

Sedimentation/Siltation

17050122 Payette

ID17050122SW001_06	Payette River - Black Canyon Reservoir Dam to mouth	66.75	MILES

Temperature, water

ID17050122SW002_02	Tributaries to Black Canyon Reservoir	18.13	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17050122SW011_04	Little Squaw Creek - 4th order (Soldier Creek to mouth)	1.71	MILES

Combined Biota/Habitat Bioassessments

ID17050122SW012_03	Soldier Creek - 3rd order	2.02	MILES

Sedimentation/Siltation

ID17050122SW015_02	Bissel Creek - 1st and 2nd order	28.79	MILES

Sedimentation/Siltation

This assessment unit was delisted for sediment, because it is intermittent. EPA's public comment said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for sediment, pending late-spring monitoring. Hawk Stone.

ID17050122SW018_04	Little Willow Creek - Indian Creek to mouth	15.48	MILES

Sedimentation/Siltation

17050123 North Fork Payette

ID17050123SW002_03	Round Valley Creek - 3rd order	2.4	MILES

Escherichia coli

ID17050123SW006_02	Beaver Creek - 1st and 2nd order	19.97	MILES

Combined Biota/Habitat Bioassessments

ID17050123SW008_05	Gold Fork - upper 5th order, above Gold Fork Ditch	2.61	MILES

Sedimentation/Siltation

ID17050123SW011_02	Boulder/Willow Creek - 1st and 2nd order irrigated sections	19.2	MILES

Combined Biota/Habitat Bioassessments

ID17050123SW011_03	Boulder Creek - 3rd order (Louie Creek to mouth)	11.55	MILES

Sedimentation/Siltation

Temperature, water

ID17050123SW012_02	Lake Fork below Little Payette Lake - 1st and 2nd order	12.13	MILES

Combined Biota/Habitat Bioassessments

ID17050123SW015_02	Mud Creek - 1st and 2nd order	25.59	MILES

Escherichia coli

Sedimentation/Siltation

ID17050123SW015_03	Mud Creek - 3rd order (Norwood to Reservoir)	7.16	MILES

Ammonia (Un-ionized)

Combined Biota/Habitat Bioassessments

Escherichia coli

Sedimentation/Siltation

Escherichia coli — Please see note attached to Secondary Contact Recreation use, and file attached to this assessment unit.
Cows were seen grazing at or near the bacteria sample site.

ID17050123SW017L_0L	Payette Lake	4986.57	ACRES

Mercury — 2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.305 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

17050124 Weiser

ID17050124SW002_02	Cove Creek - entire watershed	44.74	MILES

Sedimentation/Siltation — This assessment unit was delisted for sediment, because it is intermittent. However, EPA's 2010 public comments said that mere intermittency was not sufficient for delisting. Hence, this AU has been 're-listed' for the aforementioned causes, pending late-spring 2011 monitoring. Hawk Stone.

ID17050124SW014_03	Middle Fork Weiser River - lower 3rd order (rangeland)	9.8	MILES

Escherichia coli

Fishes Bioassessments

ID17050124SW025_03	Rush Creek - 3rd order (Beaver Creek to mouth)	6.29	MILES

Combined Biota/Habitat Bioassessments

ID17050124SW028_03	Hopper, Deer and Keithly Creeks - 3rd order	4.99	MILES

Combined Biota/Habitat Bioassessments

ID17050124SW028_04	Keithly Creek - 4th order (Deer Creek to mouth)	1.82	MILES

Combined Biota/Habitat Bioassessments

ID17050124SW030_03	Mann Creek - 3rd order	17.72	MILES

Escherichia coli

ID17050124SW033_03	Monroe Creek - 3rd order	15.4	MILES

Combined Biota/Habitat Bioassessments

17050201 Brownlee Reservoir

ID17050201SW001_08	Snake River - Hells Canyon Reservoir	1106.23	ACRES

Mercury — 2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.522 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17050201SW003_02	Tributaries to Snake River - 1st and 2nd order	106.78	MILES

Combined Biota/Habitat Bioassessments

ID17050201SW003_08	Lower Brownlee Reservoir (Porters Flat to Brownlee Dam)	13193.87	ACRES

Mercury

Mercury listing based on the DEQ reports "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" Essig and Kostermann, May 2008) and"Brownlee Reservoir Mercury TMDL Fish Tissue Study, Results and Field Summary" (Stone 2006)

Mercury listing based on the DEQ reports Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" Essig and Kostermann, May 2008) and "Brownlee Reservoir Mercury TMDL Fish Tissue Study, Results and Field Summary" (Stone 2006)

ID17050201SW005_02	Jenkins Creek - entire watershed	22.73	MILES

Escherichia coli

ID17050201SW006_03	Scott Creek - 3rd order	14.35	MILES

Escherichia coli

ID17050201SW007_03	Warm Springs Creek - 3rd order	5.31	MILES

Escherichia coli

ID17050201SW008_02	Hog Creek - 1st & 2nd order	34.42	MILES

Escherichia coli

ID17050201SW008_03	Hog Creek - 3rd order section	2.89	MILES

Escherichia coli

ID17050201SW010_04	Rock Creek - 4th order	4.82	MILES

Combined Biota/Habitat Bioassessments

Upper Snake

17040104 Palisades

ID17040104SK001_02	Snake River - Black Canyon Creek to river mile 856 (T03N, R4	48.29	MILES

Combined Biota/Habitat Bioassessments

ID17040104SK008_02	Snake River - Palisades Reservoir Dam to Fall Creek	77.84	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

ID17040104SK011_02	Bear Creek - North Fork Bear Creek to Palisades Reservoir	35.62	MILES

Combined Biota/Habitat Bioassessments

ID17040104SK013_03	Bear Creek - source to North Fork Bear Creek	6.74	MILES

Combined Biota/Habitat Bioassessments

ID17040104SK020_03	Iowa Creek - source to mouth	2.32	MILES

Combined Biota/Habitat Bioassessments

Habitat Assessment (Streams)

Cause Unknown

ID17040104SK022_02	Trout Creek - source to mouth	8.33	MILES

Sedimentation/Siltation

ID17040104SK024_04	Indian Creek - Idaho/Wyoming border to Palisades Reservoir	2.21	MILES

Combined Biota/Habitat Bioassessments

ID17040104SK028_04	Rainey Creek - source to mouth	12.46	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17040104SK029_03	Pine Creek - source to mouth	16.17	MILES

Cause Unknown

ID17040104SK030_02	Black Canyon Creek - source to mouth	7.08	MILES

Sedimentation/Siltation

17040105 Salt

ID17040105SK001_02b	Newswander Canyon	4.96	MILES

Sedimentation/Siltation

ID17040105SK002_02c	Cabin Creek	3.01	MILES

Sedimentation/Siltation

ID17040105SK003_02	Tincup Creek - source to Idaho/Wyoming border	58.46	MILES

Sedimentation/Siltation

ID17040105SK003_02a	Rich Creek	1.5	MILES

Habitat Assessment (Streams)

Cause Unknown

ID17040105SK003_02b	Whiskey Creek	1.56	MILES

Combined Biota/Habitat Bioassessments

ID17040105SK003_02c	Lau Creek	2.04	MILES

Habitat Assessment (Streams)

Cause Unknown

Idaho WBAGII using BURP Monitoring Data (June 2006)
Lau Creek, AU Split only contains Lau Creek, in Designated Roadless Area I-C, Stump Creek

ID17040105SK003_02d	Houtz Creek	1.14	MILES

Cause Unknown

ID17040105SK003_02e	Bear Canyon	3.11	MILES

Escherichia coli

ID17040105SK003_02g	Chicken Creek	1.59	MILES

Combined Biota/Habitat Bioassessments

ID17040105SK003_02i	Luthi Canyon	4.3	MILES

Combined Biota/Habitat Bioassessments

ID17040105SK003_02j	Haderlie Creek	8.65	MILES

Sedimentation/Siltation

ID17040105SK006_02c	Upper Boulder Creek	4.67	MILES

Cause Unknown

This segment of upper Boulder Creek is short and most of the degradation appears to be an artifact of historical grazing practices. There may not be enough natural energy and flow in this segment to provide a flushing effect for sediment deposition, as it originates from wetland seepage in relatively flat terrain. Although grazing still persists, little can be done in the way of management to restore or provide support for beneficial use (CWAL or SS). The segment immediately downstream is much longer and intermittent, thus this upper portion is relatively isolated from the main Boulder Creek system most of the time. TMDL establishment is probably inappropriate as the perennial, channelized portion of this segment is approximately 1/4 mile in length.

ID17040105SK006_02d	west fork Boulder Creek	3.18	MILES

Cause Unknown

ID17040105SK006_02f	White Canyon	3.2	MILES

Sedimentation/Siltation

ID17040105SK006_02g	Graehl Canyon	1.4	MILES

Combined Biota/Habitat Bioassessments

Habitat Assessment (Streams)

Cause Unknown

ID17040105SK006_04	lower Stump Creek	10.44	MILES

Sedimentation/Siltation

ID17040105SK007_02c	Smoky Creek	10.75	MILES

Escherichia coli

Sedimentation/Siltation

ID17040105SK007_02f	Draney Creek	6.85	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040105SK007_02g	Roberts Creek	5.57	MILES

Combined Biota/Habitat Bioassessments

ID17040105SK007_03	Tygee Creek - source to mouth	5.98	MILES

Sedimentation/Siltation

ID17040105SK008_02	Crow Creek - source to Idaho/Wyoming border	65.03	MILES

Escherichia coli

ID17040105SK008_02a	White Dugway Creek	5.29	MILES

Combined Biota/Habitat Bioassessments

ID17040105SK008_02c	Beaver Dam Creek	5.09	MILES

Sedimentation/Siltation

ID17040105SK008_02d	Crow Creek	6.78	MILES

Escherichia coli

ID17040105SK008_03b	Crow Creek	7.49	MILES

Escherichia coli — Did not meet state WQS for SCR in 2008.

ID17040105SK008_04	Crow Creek - Deer Creek to border	10.42	MILES

Escherichia coli

Sedimentation/Siltation

ID17040105SK009_02	North Fork Sage Creek	12.41	MILES

Selenium

ID17040105SK009_02c	Sage Creek	1.81	MILES

Combined Biota/Habitat Bioassessments

ID17040105SK009_02d	Pole Canyon Creek	3.6	MILES

Selenium

ID17040105SK009_02e	South Fork Sage Creek	7.93	MILES

Combined Biota/Habitat Bioassessments — 1/20/10: Added based on failing BURP score in 2006.

Selenium — Listing based on May 24, 2007 "Supplemental Surface Water Monitoring Data Transmittal" from Newfields.

ID17040105SK009_03	Sage Creek - confluence with North Fork Sage Creek to mout	3.22	MILES

Selenium

ID17040105SK010_02a	South Fork Deer Creek	11.69	MILES

Sedimentation/Siltation

ID17040105SK011_03	Rock Creek	3.46	MILES

Combined Biota/Habitat Bioassessments

Fishes Bioassessments

Habitat Assessment (Streams)

Cause Unknown

ID17040105SK012_02a	Little Elk Creek	8.38	MILES

Combined Biota/Habitat Bioassessments

ID17040105SK012_03	Spring Creek	1.2	MILES

Combined Biota/Habitat Bioassessments

17040201 Idaho Falls

ID17040201SK007_05	Crow Creek - source to Willow Creek	9.46	MILES

Sedimentation/Siltation

ID17040201SK013_02	Snake River - river mile 856 (T03N, R41E, Sec. 16) to Dry Be	20.45	MILES

Combined Biota/Habitat Bioassessments

17040202 Upper Henrys

ID17040202SK022_02	Moose Creek - source to confluence with Henrys Fork	18.96	MILES

Combined Biota/Habitat Bioassessments

ID17040202SK025_02	Henrys Lake Outlet - Henrys Lake Dam to mouth	33.58	MILES

Combined Biota/Habitat Bioassessments

ID17040202SK030_02	Twin Creek - source to mouth	8.55	MILES

Combined Biota/Habitat Bioassessments

ID17040202SK035_03	Timber Creek - source to mouth	3.37	MILES

Escherichia coli

ID17040202SK044_02	Icehouse Creek - source to Island Park Reservoir	17.65	MILES

Sedimentation/Siltation

ID17040202SK046_04	Willow Creek - source to mouth	9.98	MILES

Fish Kills

Sedimentation/Siltation

17040203 Lower Henrys

ID17040203SK007_02	Conant Creek - Idaho/Wyoming border to mouth	45.26	MILES

Combined Biota/Habitat Bioassessments

ID17040203SK007_03	Conant Creek - Idaho/Wyoming border to mouth	19.41	MILES

Combined Biota/Habitat Bioassessments

ID17040203SK013_04	Sand Creek - Pine Creek to mouth	10.48	MILES

Combined Biota/Habitat Bioassessments

17040204 Teton

ID17040204SK006_02	South Fork Moody Creek - source to mouth	19.98	MILES

Sedimentation/Siltation

ID17040204SK007_02	North Fork Moody Creek - source to mouth	26.35	MILES

Fecal Coliform

ID17040204SK011_02	Warm Creek - source to mouth	5.78	MILES

Combined Biota/Habitat Bioassessments

Fecal Coliform

ID17040204SK034_02	Warm Creek - source to mouth	17.6	MILES

Combined Biota/Habitat Bioassessments

Fecal Coliform

ID17040204SK046_02	Dick Creek spring complex - south to Darby Creek and north t	3.59	MILES

Combined Biota/Habitat Bioassessments

ID17040204SK049_02	Driggs Springs spring creek complex - located between Teton	4.94	MILES

Escherichia coli

ID17040204SK050_02	Woods Creek - source to mouth, including spring creek tribu	5.41	MILES

Escherichia coli

17040205 Willow

ID17040205SK005_02	Willow Creek - Birch Creek to Bulls Fork	57.41	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17040205SK005_04	Willow Creek - Birch Creek to Bulls Fork	2.47	MILES

Temperature, water

ID17040205SK008_02	Willow Creek - Mud Creek to Birch Creek	27.76	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17040205SK008_04	Willow Creek - Mud Creek to Birch Creek	9.2	MILES

Temperature, water

ID17040205SK009_02	Mud Creek - source to mouth	9.77	MILES

Combined Biota/Habitat Bioassessments

ID17040205SK019_04	Grays Lake outlet - Brockman Creek to Homer Creek	12.59	MILES

Combined Biota/Habitat Bioassessments

ID17040205SK021_02	Grays Lake - Order 1 & 2 tributaries	100.73	MILES

Combined Biota/Habitat Bioassessments

ID17040205SK024_02	Brockman Creek - Corral Creek to mouth	20.04	MILES

Escherichia coli

ID17040205SK030_02	Bulls Fork - source to mouth	23.4	MILES

Combined Biota/Habitat Bioassessments

17040206 American Falls

ID17040206SK000_02a	Danielson Creek	4.4	MILES

Combined Biota/Habitat Bioassessments

ID17040206SK001_05	American Falls Reservoir - Bannock Creek	4.36	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment□Low DO due to suspected Organic Enrichment

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ID17040206SK001L_0L	American Falls Reservoir (Snake River)	55519.2	ACRES

Chlorophyll-a

Oxygen, Dissolved

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

ID17040206SK002_02	Bannock Creek - source to American Falls Reservoir	242.01	MILES

Sedimentation/Siltation

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment

ID17040206SK002_03	Bannock Creek - source to American Falls Reservoir	14.3	MILES

Escherichia coli

Sedimentation/Siltation

ID17040206SK002_04	Bannock Creek - source to American Falls Reservoir	10.02	MILES

Sedimentation/Siltation

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment

ID17040206SK002_05	Bannock Creek - source to American Falls Reservoir	21.34	MILES

Sedimentation/Siltation

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment

ID17040206SK006_02	Moonshine Creek - source to mouth	39.52	MILES

Sedimentation/Siltation

ID17040206SK008_02	West Fork Bannock Creek - source to mouth	23.78	MILES

Sedimentation/Siltation

ID17040206SK009_02	Knox Creek - source to mouth	23.84	MILES

Sedimentation/Siltation

ID17040206SK009_03	Knox Creek - source to mouth	7.82	MILES

Combined Biota/Habitat Bioassessments

ID17040206SK010_02	Rattlesnake Creek - source to mouth	53.37	MILES

Escherichia coli

Sedimentation/Siltation

ID17040206SK010_02b	Rattlesnake Creek	1.09	MILES

Escherichia coli

Sedimentation/Siltation

ID17040206SK010_03	Rattlesnake Creek - source to mouth	9.97	MILES

Escherichia coli

Sedimentation/Siltation

ID17040206SK010_04	Rattlesnake Creek - lower	5.37	MILES

Escherichia coli

Sedimentation/Siltation

ID17040206SK022_02	Snake River - river mile 791 (T01N, R37E, Sec. 10) to Americ	107.5	MILES

Sedimentation/Siltation

ID17040206SK022_04	Snake River	110.42	MILES

Mercury

03/16/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue and Water from Idaho's Major Rivers: A Statewide Assessment" (Essig, October 2009). A Mercury level of 0.317 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17040206SK024_02	McTucker Creek - source to American Falls Reservoir	1.94	MILES

Sedimentation/Siltation

ID17040206SK024_02a	McTucker Creek	1.75	MILES

Sedimentation/Siltation

ID17040206SK025_02a	Lttle Hole Draw	4.11	MILES

Combined Biota/Habitat Bioassessments

17040207 Blackfoot

ID17040207SK002_02b	Deadman Creek	5.16	MILES

Sedimentation/Siltation

ID17040207SK005_02	Grave Creek - source to mouth	14.35	MILES

Sedimentation/Siltation

ID17040207SK005_02a	Grave Creek	3.96	MILES

Sedimentation/Siltation

ID17040207SK005_02b	Warbonnet Creek	6.22	MILES

Escherichia coli

Sedimentation/Siltation

ID17040207SK005_02c	Wood Creek	3.2	MILES

Sedimentation/Siltation

ID17040207SK005_02d	Coyote Creek	1.23	MILES

Sedimentation/Siltation

ID17040207SK005_02e	Sunday Creek	5.28	MILES

Sedimentation/Siltation

ID17040207SK005_03	Grave Creek - West Creek to Blackfoot River	5.48	MILES

Sedimentation/Siltation

ID17040207SK006_02	Corral Creek - Headwaters and unnamed tributaries	40.65	MILES

Escherichia coli

ID17040207SK006_02a	Chicken Creek - headwaters to Corral Creek	6.59	MILES

Sedimentation/Siltation

ID17040207SK006_02b	Bear Creek - headwaters to Corral Creek	3.84	MILES

Sedimentation/Siltation

ID17040207SK006_03	Corral Creek - middle	9.22	MILES

Escherichia coli

ID17040207SK006_04	Corral Creek - lower	6.59	MILES

Escherichia coli

ID17040207SK007_02a	Sawmill Creek - headwaters to Grizzly Creek	7.44	MILES

Escherichia coli — 2/22/10 = Did not meet state WQS for SCR in 2007.

ID17040207SK008_02	Thompson Creek - upper	10.71	MILES

Sedimentation/Siltation

Escherichia coli — 2/22/10 = Did not meet state WQS for SCR in 2007.

ID17040207SK008_03	Thompson Creek - source to mouth	2.32	MILES

Escherichia coli — Did not meet state WQS for SCR in 2007.

ID17040207SK009_02a	Collett Creek - headwaters to Blackfoot Reservoir	3.98	MILES

Sedimentation/Siltation

Escherichia coli — 2/22/10 = Did not meet state WQS for SCR in 2007.

ID17040207SK009_02b	Poison Creek	8.84	MILES

Escherichia coli

Sedimentation/Siltation

ID17040207SK009_03	Little Blackfoot River	7.67	MILES

Sedimentation/Siltation

ID17040207SK010_02a	State Land Creek - headwaters to Blackfoot River	9.07	MILES

Sedimentation/Siltation

Selenium

Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area.

ID17040207SK010_04	Blackfoot River - headwaters to Slug Creek	13.82	MILES

Oxygen, Dissolved

Selenium

Temperature, water

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ID17040207SK010_05	Blackfoot River - confluence of Lanes and Diamond Creeks to	20.67	MILES

Oxygen, Dissolved

Temperature, water

Selenium — Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area.

ID17040207SK012_02a	upper Johnson Creek	4.85	MILES

Combined Biota/Habitat Bioassessments

ID17040207SK012_02b	Goodheart Creek	7.54	MILES

Sedimentation/Siltation

Selenium — Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area.

ID17040207SK012_03a	lower Johnson Creek	2.91	MILES

Combined Biota/Habitat Bioassessments

ID17040207SK013_02a	Dry Valley Creek	6.43	MILES

Selenium

ID17040207SK013_02b	Chicken Creek (tributary to Dry Valley Creek)	2.86	MILES

Selenium

ID17040207SK013_03	Dry Valley Creek - source to mouth	4.98	MILES

Selenium

ID17040207SK014_02	Maybe Creek - source to mouth	5.23	MILES

Selenium

ID17040207SK015_02	Spring Creek	5.89	MILES

Escherichia coli

Selenium

Temperature, water — Exceeded state WQS for SS and CWAL. See documentation in IDASA.

Selenium — Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area.

ID17040207SK015_02a	upper Mill Canyon	2.44	MILES

Sedimentation/Siltation

Selenium — Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area.
Plus additional data sources.

ID17040207SK015_02b	lower Mill Canyon	1.03	MILES

Selenium

Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area. Plus additional data sources.

ID17040207SK015_03	lower Spring Creek	1.5	MILES

Escherichia coli

Selenium

Temperature, water

	Exceeded state WQS for SS and CWAL. See documentation in IDASA.
Selenium	Se listed based on DEQ data. See DEQ 2006. Selenium Project Southeast Idaho Phosphate Mining Resource Area.

ID17040207SK016_02	Diamond Creek - unnamed tributaries	41.77	MILES

Escherichia coli

ID17040207SK016_02a	upper Diamond Creek	4.43	MILES

Escherichia coli

Temperature, water	Exceeded state WQS for SS. See documentation in IDASA.

ID17040207SK016_03	lower Diamond Creek	19.26	MILES

Escherichia coli

Temperature, water	Exceeded state WQS for SS. See documentation in IDASA.

ID17040207SK016_03a	middle Diamond Creek	10.65	MILES

Escherichia coli

Temperature, water	Exceeded state WQS for SS. See documentation in IDASA.

ID17040207SK021_02a	upper Olsen Creek	3.04	MILES

Temperature, water	Exceeded state WQS for SS. See IDASA for documentation.

ID17040207SK021_03	lower Chippy Creek	4.61	MILES

Combined Biota/Habitat Bioassessments

Habitat Assessment (Streams)

Sedimentation/Siltation

ID17040207SK022_02	Upper Sheep Creek - headwaters and unnamed tributaries	13.49	MILES

Temperature, water

	Exceeded state WQS for CWAL and SS.
Selenium	Sheep Creek and West Fork Sheep Creek have been added to section 5 (impaired rivers) because water samples collected in 2008 (IDEQ Area-Wide Annual sampling) from Sheep Creek exceeded the 4-day average selenium concentration criteria of 0.005 mg/l total recoverable selenium. Sheep Cr. also exceeded this criterion in May 2006 but not in May 2007. IDAPA 58.01.02.210.03.c.v. states criteria concentrations are not to be exceeded more than once in three years. These recent data suggest a criteria exceedance of twice in three years creating a water quality standards violation which meets the requirements for impaired status and listing. Wooley Valley Creek did not exceed criteria in 2008 (IDEQ Area Wide Annual sampling) and based on available data has not exceeded the water quality standard for selenium.

ID17040207SK022_03	lower Sheep Creek	1.32	MILES

Selenium

Sheep Creek and West Fork Sheep Creek have been added to section 5 (impaired rivers) because water samples collected in 2008 (IDEQ Area-Wide Annual sampling) from Sheep Creek exceeded the 4-day average selenium concentration criteria of 0.005 mg/l total recoverable selenium. Sheep Cr. also exceeded this criterion in May 2006 but not in May 2007. IDAPA 58.01.02.210.03.c.v. states criteria concentrations are not to be exceeded more than once in three years. These recent data suggest a criteria exceedance of twice in three years creating a water quality standards violation which meets the requirements for impaired status and listing. Wooley Valley Creek did not exceed criteria in 2008 (IDEQ Area Wide Annual sampling) and based on available data has not exceeded the water quality standard for selenium.

ID17040207SK022_03a	middle Sheep Creek	3.53	MILES

Selenium

Sheep Creek and West Fork Sheep Creek have been added to section 5 (impaired rivers) because water samples collected in 2008 (IDEQ Area-Wide Annual sampling) from Sheep Creek exceeded the 4-day average selenium concentration criteria of 0.005 mg/l total recoverable selenium. Sheep Cr. also exceeded this criterion in May 2006 but not in May 2007. IDAPA 58.01.02.210.03.c.v. states criteria concentrations are not to be exceeded more than once in three years. These recent data suggest a criteria exceedance of twice in three years creating a water quality standards violation which meets the requirements for impaired status and listing. Wooley Valley Creek did not exceed criteria in 2008 (IDEQ Area Wide Annual sampling) and based on available data has not exceeded the water quality standard for selenium.

ID17040207SK023_02	Angus Creek - unnamed tribs	11.34	MILES

Escherichia coli

ID17040207SK023_02a	Rasmussen Creek	6.26	MILES

Selenium

Se listing based on DEQ data. See Annual TMDL baseline monitoring reports for Se.

ID17040207SK023_02b	upper Angus Creek - headwaters to Rasumussen Creek	7.78	MILES

Escherichia coli

Temperature, water — Exceeded state WQS for CWAL and SS. See IDASA for documentation.

Selenium — Selenium listing based on 4-day average selenium water column concentration > 5 ppb during IDEQ sampling events in 2005 and 2006

ID17040207SK023_04	Lower Angus Creek - Rasmussen Creek to Blackfoot River	3.46	MILES

Escherichia coli

Temperature, water — Exceeded state WQS for CWAL and SS. See documentation in IDASA.

ID17040207SK025_02c	Clarks Cut - Sheep Creek to HUC boundary	1.47	MILES

Sedimentation/Siltation

ID17040207SK025_03b	Crooked Creek	2.13	MILES

Sedimentation/Siltation

ID17040207SK027_02	Rawlins Creek - headwaters to Horse Creek	6.21	MILES

Sedimentation/Siltation

ID17040207SK027_02b	Poison Creek	12.11	MILES

Escherichia coli — 2/22/10 = Did not meet state WQS for SCR in 2002.

ID17040207SK027_03	Rawlins Creek - source to mouth	1.89	MILES

Fecal Coliform

ID17040207SK029_02	Cedar Creek - source to mouth	21.55	MILES

Escherichia coli — 2/22/10 - Did not meet WQS for SCR in 2007.

ID17040207SK029_03	Cedar Creek - source to mouth	2.1	MILES

Benthic-Macroinvertebrate Bioassessments

Combined Biota/Habitat Bioassessments

Habitat Assessment (Streams)

Sedimentation/Siltation

Escherichia coli — 2/22/10 = Did not meet WQS for SCR in 2007.

ID17040207SK031_02	Jones Creek - source to mouth	4.54	MILES

Sedimentation/Siltation — DEQ Depth fine and streambank erosion inventory data collected in 2008 are below established target levels. Sediment TMDL scheduled for development.

17040208 Portneuf

ID17040206SK001L_0L	American Falls Reservoir (Snake River)	55519.2	ACRES

Chlorophyll-a

Oxygen, Dissolved

Sedimentation/Siltation

Nutrient/Eutrophication Biological Indicators

ID17040208SK001_02c	Papoose Creek - headwaters to Portneuf River	3.03	MILES

Escherichia coli — Failed Idaho WQS for bacteria in 2007.

ID17040208SK001_05	Portneuf River - Marsh Creek to American Falls Reservoir	28.79	MILES

Oxygen, Dissolved

Temperature, water

ID17040208SK002_02	City Creek - source to mouth	6.48	MILES

Escherichia coli

ID17040208SK004_02c	South Fork Mink Creek - headwaters to Mink Creek	6.77	MILES

Escherichia coli

ID17040208SK004_03a	Mink Creek - S. Fk to E. Fk Mink Creek	2.82	MILES

Escherichia coli

ID17040208SK004_04a	Mink Creek	1.52	MILES

Escherichia coli

ID17040208SK006_02a	Arkansas Creek	2.61	MILES

Sedimentation/Siltation — IDEQ water quality sampling indicated total suspended sediment of 130 mg/L during 27 June 2006 site visit.

Nitrogen (Total) — IDEQ water quality sampling indicates high total nitrogen (>7 mg/L) and total phosphorus mean concentrations (>0.12 mg/L)

Phosphorus (Total)

ID17040208SK006_03	upper middle Marsh Creek	11.09	MILES

Oxygen, Dissolved

Temperature, water

ID17040208SK006_03a	Marsh Creek - Rt Fk to Red Rock Pass	3.79	MILES

Oxygen, Dissolved

Temperature, water

ID17040208SK006_04	Lower Marsh Creek	17.68	MILES

Escherichia coli

Oxygen, Dissolved

Temperature, water

ID17040208SK006_04a	lower middle Marsh Creek	19.77	MILES

Oxygen, Dissolved

Temperature, water

ID17040208SK010_02a	upper Garden Creek - headwaters to Garden Creek Gap	9.49	MILES

Escherichia coli

ID17040208SK013_02b	Yellow Dog Creek - headwaters to Hawkins Creek	6	MILES

Escherichia coli

ID17040208SK014_03	Cherry Creek - lower	1.58	MILES

Escherichia coli

ID17040208SK014_04	Birch Creek from Cherry Creek to Marsh Creek confluences	2.73	MILES

Escherichia coli

ID17040208SK015_03a	Birch Creek - Mill Creek to I-15 road crossing	2.8	MILES

Escherichia coli

ID17040208SK016_02b	East Bob Smith Creek	6.75	MILES

Escherichia coli

ID17040208SK016_02c	West Bob Smith Creek	4.1	MILES

Escherichia coli

ID17040208SK016_03	Portneuf River - Chesterfield Reservoir Dam to Marsh Creek	5.52	MILES

Temperature, water

ID17040208SK016_04	Portneuf River - Chesterfield Reservoir Dam to Marsh Creek	2.82	MILES

Temperature, water — Based on assessment of Portneuf River u/s of Marsh Creek sonde data. Exceeded 24 days in 2004 and 25 days in 2006.

ID17040208SK016_05	Portneuf River - 5th Order	52.79	MILES

Mercury

Temperature, water

Mercury

03/16/2010 - Mercury listing based on the DEQ report, "Upper Portneuf River Fish Tissue and Water Column Mercury Sampling Results 2007". A Mercury level of 0.396 mg/kg for Brown Trout collected from the Topez reach was reported. This result exceeds the human health criterion of 0.3 mg/kg. NED

ID17040208SK017_02d	Dempsey Creek	18.45	MILES

Escherichia coli

ID17040208SK022_03	lower Pebble Creek	6.06	MILES

Escherichia coli

ID17040208SK022_03a	North Fork Pebble Creek	0.99	MILES

Escherichia coli

ID17040208SK023_02e	upper Moonlight Creek	2.76	MILES

Escherichia coli

ID17040208SK023_02f	lower Moonlight Creek	0.71	MILES

Escherichia coli

ID17040208SK026_02a	North Fork Pocatello Creek - headwaters to Pocatello Creek	10.52	MILES

Escherichia coli

17040209 Lake Walcott

ID17040209SK002_07	Snake River - Minidoka Dam to Heyburn/Burley Bridge (T10S,	20.63	MILES

Sedimentation/Siltation

ID17040209SK003_03	Marsh Creek - source to mouth	10.71	MILES

Combined Biota/Habitat Bioassessments

ID17040209SK003_04	Marsh Creek - source to mouth	17.81	MILES

Combined Biota/Habitat Bioassessments

ID17040209SK004L_0L	Lake Walcott (Snake River)	8389.19	ACRES

Mercury

2/18/2010 - A mercury level of 0.332 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported for the samples of Small Mouth Bass that were collected June 2005. NED

Small mouth bass fish tissue data collected in 2005.

ID17040209SK011_02	Snake River - American Falls Reservoir Dam to Rock Creek	31.61	MILES

Combined Biota/Habitat Bioassessments

ID17040209SK013_02	Copper Creek	115.6	MILES

Combined Biota/Habitat Bioassessments

ID17040209SK013_03	3rd order Cottonwood Ck in the Craters of the Moon Complex	13.37	MILES

Combined Biota/Habitat Bioassessments

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17040210 Raft

ID17040210SK005_04	Cassia Creek - Clyde Creek to Conner Creek	4.49	MILES

Temperature, water

ID17040210SK006_02	Clyde Creek - source to mouth	24.87	MILES

Escherichia coli — Pathogens on the 2002 IR. Maintaining assessment until further data can be collected

17040211 Goose

ID17040211SK002L_0L	Lower Goose Creek Reservoir	1005.71	ACRES

Mercury

2/18/2010 - Mercury listing based on the DEQ report, "Arsenic, Mercury, and Selenium in Fish Tissue from Idaho Lakes and Reservoirs: A Statewide Assessment" (Essig and Kostermann, May 2008). A Mercury level of 0.378 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported. NED

ID17040211SK007_02	Trout Creek - source to Idaho/Nevada border	19.97	MILES

Sedimentation/Siltation

Temperature, water — Idaho Fish and Game temperature logger data: 2001IDFGTL082. Maximum daily maximum temperature exceeded for lengthy periods during the critical time period for cold water biota.

ID17040211SK007_03	Trout Creek - source to Idaho/Nevada border	1.97	MILES

Combined Biota/Habitat Bioassessments

ID17040211SK008_02	Goose Creek - source to Idaho/Utah border	63.16	MILES

Temperature, water

IDFG temperature logger 2001IDFGTL083 indicates that tmeperature exceeded water quality standards.

17040212 Upper Snake-Rock

ID17040212SK000_02	Unclassified Waters in CU 17040212	392.31	MILES

Cause Unknown — Low DO due to suspected Organic Enrichment

ID17040212SK000_03A	Yahoo Creek	2.23	MILES

Sedimentation/Siltation

Fecal Coliform

ID17040212SK010_03	Mud Creek - Deep Creek Road (T09S, R14E) to mouth	1.07	MILES

Temperature, water

ID17040212SK012_03	Cedar Draw - source to mouth	2.93	MILES

Temperature, water

ID17040212SK014_02	Cottonwood Creek - source to mouth	37.64	MILES

Temperature, water

ID17040212SK015_02	McMullen Creek - source to mouth	50.02	MILES

Temperature, water

ID17040212SK015_03	McMullen Creek - source to mouth	9.41	MILES

Temperature, water

ID17040212SK020_07	Snake River - Milner Dam to Twin Falls	21.29	MILES

Temperature, water

ID17040212SK022_03	Dry Creek - source to mouth	9.85	MILES

Temperature, water

ID17040212SK028_02	Clear Lakes	22.24	ACRES

Escherichia coli

E. coli was added to primary and secondary contact recreation. This addition was made because the beneficial uses were listed as not full support but did not have causes associated with them. As a result, an assessment of the bacteria of Clear Lakes will need to be conducted to remove this water body from the integrated report.

ID17040212SK034_04	Clover Creek - Pioneer Reservoir Dam outlet to Snake River	9.96	MILES

Temperature, water

1/28/2010 - EPA add January 2001. NED

ID17040212SK035_04	Pioneer Reservoir	229.81	ACRES

Temperature, water

Escherichia coli

3/20/2009 - Fecal coliform has been delisted and E.coli has been listed as the impairment due to a change in DEQ's water quality standards from a criterion associated with fecal coliform to a more specific criterion for E. coli. NED

ID17040212SK036_02	Clover Creek - source to Pioneer Reservoir	55.67	MILES

Temperature, water

Escherichia coli

62.9% pathogen load reduction has been applied to Clover Creek (see pg 199 Upper Snake Rock Watershed Management Plan) Addtion reductions in pathogens are expected in conjunction with TSS reductions.

ID17040212SK036_04	Clover Creek - source to Pioneer Reservoir	26.04	MILES

Combined Biota/Habitat Bioassessments

Fishes Bioassessments

Habitat Assessment (Streams)

Cause Unknown

Nutrients Suspected Impairment

ID17040212SK038_02	Catchall Creek - source to mouth	15.85	MILES

Combined Biota/Habitat Bioassessments

ID17040212SK040_02	Calf Creek - source to mouth	35.87	MILES

Temperature, water

ID17040212SK040_03	Calf Creek - source to mouth	6.56	MILES

Sedimentation/Siltation

Temperature, water

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment

17040213 Salmon Falls

ID17040213SK008_02	China, Browns, Corral, Whiskey Slough, Player Creeks - sourc	47.57	MILES

Temperature, water

17040214 Beaver-Camas

ID17040214SK006_03	Ching Creek - source to mouth	11.93	MILES

Escherichia coli

ID17040214SK008_02	Crooked/Crab Creek - source to mouth	30.04	MILES

Combined Biota/Habitat Bioassessments

ID17040214SK008_03	Crooked/Crab Creek - source to mouth	11.01	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17040214SK009_02	Warm Creek - Cottonwood Creek to mouth and East Camas C	11.69	MILES

Combined Biota/Habitat Bioassessments

Fecal Coliform

ID17040214SK010_03	East Camas Creek - from and including Larkspur Creek to T13	4.26	MILES

Escherichia coli

ID17040214SK013_02	West Camas Creek - source to Targhee National Forest Boun	52.56	MILES

Sedimentation/Siltation

Wolman Pebble Count data indicates a high percentage of sand/silt in nearly all streams in this AU. 12-14-09 SR

ID17040214SK016_02	Rattlesnake Creek - source to mouth	56.85	MILES

Combined Biota/Habitat Bioassessments

ID17040214SK016_03	Rattlesnake Creek - source to mouth	10.51	MILES

Combined Biota/Habitat Bioassessments

ID17040214SK017_02	Threemile Creek - source to mouth	23.11	MILES

Combined Biota/Habitat Bioassessments

ID17040214SK017_03	Threemile Creek - source to mouth	1.82	MILES

Fecal Coliform

ID17040214SK018_02	Beaver Creek - Miners Creek to Rattlesnake Creek	40.25	MILES

Combined Biota/Habitat Bioassessments

ID17040214SK020_02	Beaver Creek - Idaho Creek to Miners Creek	12.83	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17040214SK021_02	Beaver Creek - source to Idaho Creek	68.4	MILES

Escherichia coli

17040215 Medicine Lodge

ID17040215SK005_02	West Fork Indian Creek - source to mouth	24.45	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17040215SK007_02	Middle Creek - Dry Creek to mouth	27.36	MILES

Sedimentation/Siltation

ID17040215SK007_03	Middle Creek - Dry Creek to mouth	5.61	MILES

Fecal Coliform

ID17040215SK008_02	Middle Creek - source to Dry Creek	12.12	MILES

Sedimentation/Siltation

ID17040215SK009_02	Dry Creek - source to mouth	5.2	MILES

Sedimentation/Siltation

ID17040215SK010_02	Edie Creek - source to mouth	10.17	MILES

Escherichia coli

ID17040215SK012_02	Irving Creek - source to mouth	13.69	MILES

Escherichia coli

ID17040215SK013_02	Warm Creek - source to mouth	14.87	MILES

Sedimentation/Siltation

ID17040215SK013_03	Warm Creek - source to mouth	2.44	MILES

Sedimentation/Siltation

ID17040215SK014_02	Divide Creek - source to mouth	13.86	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

ID17040215SK015_02	Horse Creek - source to mouth	8.42	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

ID17040215SK018_02	Deep Creek - source to mouth	77.1	MILES

Combined Biota/Habitat Bioassessments

Sedimentation/Siltation

ID17040215SK018_03	Deep Creek - source to mouth	8.98	MILES

Sedimentation/Siltation

ID17040215SK021_02	Crooked Creek - source to mouth	53.08	MILES

Combined Biota/Habitat Bioassessments

Escherichia coli

Sedimentation/Siltation

17040217 Little Lost

ID17040217SK001_05	Little Lost River - canal (T06N, R28E) to playas	18.62	MILES

Temperature, water

ID17040217SK002_05	Little Lost River - Big Spring Creek to canal (T06N, R28E)	5.77	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17040217SK003_02	Big Spring Creek - source to mouth	8.1	MILES

Temperature, water

ID17040217SK003_03	Big Spring Creek - source to mouth	7.1	MILES

Temperature, water

Cause Unknown

ID17040217SK003_04	Big Spring Creek - source to mouth	1.98	MILES

Temperature, water

ID17040217SK007_02	Little Lost River - Badger Creek to Big Spring Creek	79.14	MILES

Fishes Bioassessments

Sedimentation/Siltation

Temperature, water

ID17040217SK007_04	Little Lost River - Badger Creek to Big Spring Creek	14.14	MILES

Combined Biota/Habitat Bioassessments

ID17040217SK009_02	Little Lost River - Wet Creek to Badger Creek	54.26	MILES

Sedimentation/Siltation

Temperature, water

ID17040217SK010_04	Little Lost River - confluence of Summit and Sawmill Creeks	8.56	MILES

Combined Biota/Habitat Bioassessments

ID17040217SK014_02	Sawmill Creek - confluence of Timber Creek and Main Fork to	33.78	MILES

Temperature, water

Combined Biota/Habitat Bioassessments — This watershed is moderately to heavily grazed during the summer months. 1-12-10 SR

ID17040217SK014_04	Sawmill Creek - confluence of Timber Creek and Main Fork to	7.65	MILES

Temperature, water

ID17040217SK015_02	Squaw Creek - source to mouth	12.53	MILES

Temperature, water

ID17040217SK018_03	Timber Creek - source to mouth	1.48	MILES

Temperature, water

ID17040217SK019_02a	Moffett Creek	1.35	MILES

Combined Biota/Habitat Bioassessments

Temperature, water

ID17040217SK019_03	Summit Creek - source to mouth	9	MILES

Temperature, water

ID17040217SK020_03	Dry Creek - Dry Creek Canal to mouth	14.64	MILES

Temperature, water

ID17040217SK021_02	Dry Creek - source to Dry Creek Canal	46.67	MILES

Temperature, water

ID17040217SK021_03	Dry Creek - source to Dry Creek Canal	2.69	MILES

Temperature, water

ID17040217SK023_02	Squaw Creek - source to mouth	25.9	MILES

Combined Biota/Habitat Bioassessments

ID17040217SK025_02	Deer Creek - source to mouth	17.21	MILES

Temperature, water

17040218 Big Lost

ID17040218SK002_06	Big Lost River - Spring Creek to Big Lost River Sinks (playa	72.2	MILES

Sedimentation/Siltation

Temperature, water

Cause Unknown — Nutrients Suspected Impairment Low DO due to suspected Organic Enrichment

ID17040218SK009_02	Pass Creek - source to mouth	50.16	MILES

Combined Biota/Habitat Bioassessments

ID17040218SK013_05	Big Lost River - Jones Creek to McKay Reservoir	4.03	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment

ID17040218SK015_05	Big Lost River - Thousand Springs Creek to Jones Creek	4.77	MILES

Sedimentation/Siltation

Cause Unknown — Nutrients Suspected Impairment

ID17040218SK016_02	Thousand Springs Creek - source to mouth	20.15	MILES

Temperature, water

ID17040218SK020_03	Willow Creek - source to mouth	4.05	MILES

Combined Biota/Habitat Bioassessments

ID17040218SK022_02	Sage Creek - source to mouth	35.64	MILES

Fecal Coliform

ID17040218SK024_02	Big Lost River - Burnt Creek to Thousand Springs Creek	98.61	MILES

Combined Biota/Habitat Bioassessments

ID17040218SK024_03	Big Lost River - Burnt Creek to Thousand Springs Creek	1.4	MILES

Combined Biota/Habitat Bioassessments

ID17040218SK024_05	Big Lost River - Burnt Creek to Thousand Springs Creek	21.44	MILES

Sedimentation/Siltation

ID17040218SK025_02	Big Lost River - Summit Creek to and including Burnt Creek	30.42	MILES

Combined Biota/Habitat Bioassessments

ID17040218SK026_02	Bridge Creek - source to mouth	21.49	MILES

Cause Unknown	Nutrients Suspected Impairment

ID17040218SK026_03	Bridge Creek - source to mouth	3.94	MILES

Temperature, water	6/28/2011 (NED) - On page xix of the Big Lost Subbasin Assessment and TMDL, it states that there was not sufficient temperature data to develop a TMDL for thermal loading.

ID17040218SK030_04	Wildhorse Creek - Fall Creek to mouth	4.95	MILES

Fecal Coliform

17040219 Big Wood

ID17040219SK008_02	Quigley Creek - source to mouth	15.9	MILES

Temperature, water

ID17040219SK028_02	Rock Creek - source to mouth	39.41	MILES

Temperature, water

ID17040219SK030_02	Black Canyon Creek - source to mouth	121.58	MILES

Temperature, water

Total Suspended Solids (TSS)

Cause Unknown	Nutrients Suspected Impairment

ID17040219SK030_03	Black Canyon Creek - source to mouth	28.05	MILES

Total Suspended Solids (TSS)

Cause Unknown	Nutrients Suspected Impairment

17040220 Camas

2010 Integrated Report: Category 5 (§303(d))

ID17040220SK023L_0L	Mormon Reservoir	1583.94	ACRES

Mercury

2/22/2010 - A mercury level of 0.33 mg/kg, which exceeds the human health criterion of 0.3 mg/kg, was reported from the fish tissue samples collected in April 2007. NED

17040221 Little Wood

ID17040221SK009_03	West Fork Fish Creek - source to Fish Creek Reservoir (dry).	3.33	MILES

Sedimentation/Siltation

Fecal Coliform

Cause Unknown — Nutrients Suspected Impairment□Low DO due to suspected Organic Enrichment

ID17040221SK020_02A	Cold Spring Creek	16.79	MILES

Combined Biota/Habitat Bioassessments

ID17040221SK023_03	Silver Creek - source to mouth	25.26	MILES

Combined Biota/Habitat Bioassessments

Appendix K. Assessment Unit-Cause Combinations Delisted in the 2010 Integrated Report

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2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

Bear River

16010102 Central Bear

ID16010102BR003_04 Thomas Fork - Idaho/Wyoming border to mouth 30.09 MILES

Sedimentation/Siltation — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

The Bear River/Malad River Subbasin Assessment and TMDL, approved 6/29/2006, address the sediment impacts to the Thomas Fork by setting load allocations for TSS. Refer to Section 1.1 page 20 of the TMDL for additional information on the TSS load allocations.

To correct that fact that essentially the same cause is listed twice (TSS and Sedimentation) a decision was made between EPA and DEQ to delist sediment due to a listing error since there is a TSS TMDL.

16010201 Bear Lake

ID16010201BR002_02b Wood Canyon Creek - headwaters to groundwater 7.24 MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

No WQ data to support listing. Passed BURP in 2004 and 1999.

ID16010201BR010_02 North Creek - source to mouth 18.01 MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

No BURP site associated with this AU.

ID16010201BR010_02b Emigration Creek - HW to North Creek 7.54 MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

Flaws in original listing. No WQ data to support non support. Passes BURP.

ID16010201BR015_03 Spring Creek - St. Charles Cr to Mud Lake 2.69 MILES

Cause Unknown — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

2/9/2010 - No BURP or WQ data to support a listing. MT

Sedimentation/Siltation — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

2/9/10 MT - No BURP or WQ data to support a listing.

ID16010201BR020_02f Snowslide Creek - lower 0.86 MILES

Escherichia coli — **Applicable WQS attained; original basis for listing was incorrect**

Flaws in orginal listing. No WQ data to support listing for bacteria. Bacterial montioring shows SCR meeting WQS.

16010203 Little Bear-Logan

ID16010203BR002_03 Logan River - source to Idaho/Utah border 1.21 MILES

Cause Unknown — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

Delist for cause unknown and relist for sediment. Grazing has contributed to sedimentation as source of failing BURP in 2002. BURP passed in 2007 but, will continue with listing and further assess through TMDL process.

16010204 Lower Bear-Malad

ID16010204BR002_02	Devil Creek - Devil Creek Reservoir Dam to mouth	10.01	MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

7/28/2010 (NED) - During the development of the Bear River/Malad River Subbasin Assessment and TMDL, approved 6/29/2006, it was determined that the cause of the impairment (cause unknown) was phosphorus (total). Therefore, cause unknown has been delisted and replaced with phosphorus (total). The TP load allocation for Devil Creek is 67 kg/year. Refer to page 28 of the TMDL for additional information.

Clearwater

17060108 Palouse

ID17060108CL005_02	Paradise Creek - Urban boundary to Idaho/Washington border	6.62	MILES

Fecal Coliform — **TMDL approved or established by EPA (4A)**

Paradise Creek TMDL was developed for pathogens/Fecal coliform bacteria in 1998. Data are found on pages 45-47, Paradise Creek TMDL, 12/23/1997. E.coli has been monitored (2002) in follow up as fecal coliform bacteria has been replaced with E. coli bacteria numeric criteria in the Idaho Water Quality Standards.
2002 E. coli data >2400 /ml, SCR remains not supporting.

ID17060108CL005_02a	Paradise Creek - forest habitat boundary to Urban boundary	22.34	MILES

Fecal Coliform — **TMDL approved or established by EPA (4A)**

Paradise Creek TMDL was developed for pathogens/Fecal coliform bacteria in 1998. Data are found on pages 45-47, Paradise Creek TMDL, 12/23/1997. E.coli has been monitored (2002) in follow up as fecal coliform bacteria has been replaced with E. coli bacteria numeric criteria in the Idaho Water Quality Standards.

17060306 Clearwater

ID17060306CL044_06	Potlatch River - 6th Order	16.36	MILES

Escherichia coli — **Applicable WQS attained; original basis for listing was incorrect**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). In the Potlatch River subbasin assessment, bacteria (E. coli) was removed from the list of impairments for this assessment unit. The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB, 1/10.

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Sediment criteria found in Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. The most available water column sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.3, pages 76-79) are a monthly average of 50 mg/L TSS with a maximum daily limit of 80 mg/L to allow for natural variability. These targets are consistent with targets applied in other sediment TMDLs addressing sediment in the Lower Clearwater Subbasin. Existing sediment loads in these water bodies are shown in Section 5.3. The daily TSS load allocation data are listed on pages 80-89.
CB, 1/10.

Temperature, water — **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL045_05	Potlatch River - 5th Order	18.48	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL046_04	Cedar Creek - 4th Order	5.18	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Sediment criteria found in Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. The most available water column sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.3, pages 76-79) are a monthly average of 50 mg/L TSS with a maximum daily limit of 80 mg/L to allow for natural variability. These targets are consistent with targets applied in other sediment TMDLs addressing sediment in the Lower Clearwater Subbasin. Existing sediment loads in these water bodies are shown in Section 5.3. The daily TSS load allocation data are listed on pages 80-89.
CB, 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL047_03	Boulder Creek - 3rd Order	4.14	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL048_04	Potlatch River - 4th Order	6.66	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

1/10 (CB) - The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214.

ID17060306CL048_05	Potlatch River - 5th Order	7.7	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL049_02	Potlatch River - headwaters	61.68	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL049_03	Potlatch River - 3rd Order	5.3	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

ID17060306CL049_04	Potlatch River - 4th Order	3.71	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL051_04	East Fork Potlatch River - 4th Order	4.73	MILES

Escherichia coli **Applicable WQS attained; original basis for listing was incorrect**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). In the Potlatch River subbasin assessment, bacteria (E. coli) was removed from the list of impairments for this assessment unit. The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL052_03	Ruby Creek - 3rd Order	2.14	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

ID17060306CL053_02	Moose Creek - headwaters	15.72	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL053_03	Moose Creek - 3rd Order	5.08	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL054_02	Corral Creek - headwaters	22.29	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL054_03	Corral Creek - 3rd Order	7.57	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL055_02	Pine Creek - headwaters	35.97	MILES

Nutrient/Eutrophication Biological Indicators **TMDL approved or established by EPA (4A)**

A nutrient TMDL that addresses the limiting nutrient, total phosphorus, was developed for Pine Creek and approved by EPA, February 13, 2009. The nutrient TMDL for Pine Creek (section 5.2) is described on pages 70-73. Monitoring data are found in Appendix B, page 166. CB 1/10.

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Sediment criteria found in Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. The most available water column sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.3, pages 76-79) are a monthly average of 50 mg/L TSS with a maximum daily limit of 80 mg/L to allow for natural variability. These targets are consistent with targets applied in other sediment TMDLs addressing sediment in the Lower Clearwater Subbasin. Existing sediment loads in these water bodies are shown in Section 5.3. The daily TSS load allocation data are listed on pages 80-89.
CB, 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL055_03	Pine Creek - 3rd Order	3.87	MILES

Nutrient/Eutrophication Biological Indicators **TMDL approved or established by EPA (4A)**

A nutrient TMDL that addresses the limiting nutrient, total phosphorus, was developed for Pine Creek and approved by EPA, February 13, 2009. The nutrient TMDL for Pine Creek (section 5.2) is described on pages 70-73. Monitoring data are found in Appendix B, page 166. CB 1/10.

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Sediment criteria found in Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. The most available water column sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.3, pages 76-79) are a monthly average of 50 mg/L TSS with a maximum daily limit of 80 mg/L to allow for natural variability. These targets are consistent with targets applied in other sediment TMDLs addressing sediment in the Lower Clearwater Subbasin. Existing sediment loads in these water bodies are shown in Section 5.3. The daily TSS load allocation data are listed on pages 80-89.
CB, 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

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ID17060306CL056_04	Big Bear Creek - 4th Order	17.06	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL056_05	Big Bear Creek - 5th Order	1.01	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL062_02	Middle Potlatch Creek - headwaters	45.85	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Sediment criteria found in Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. The most available water column sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.3, pages 76-79) are a monthly average of 50 mg/L TSS with a maximum daily limit of 80 mg/L to allow for natural variability. These targets are consistent with targets applied in other sediment TMDLs addressing sediment in the Lower Clearwater Subbasin. Existing sediment loads in these water bodies are shown in Section 5.3. The daily TSS load allocation data are listed on pages 80-89.
CB, 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

ID17060306CL062_03	Middle Potlatch Creek - 3rd Order	14.47	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. The E. coli bacteria TMDL, section 5.1, is described on pages 64-70. The state of Idaho criteria for E. coli is that bacteria are not to exceed 126 colony forming units per 100 milliliters of solution (cfu/100 ml) as a 30-day geometric mean. There are instantaneous limits of 406 cfu/100 ml for primary contact recreation uses and 576 cfu/100 ml for secondary contact uses (IDAPA 58.01.02.251.01 & 02). The 30-day geometric mean using 5 evenly spaced E. coli bacteria samples was conducted at selected sites in 2003 throughout the Potlatch River watershed. Data are listed in Appendix B, Potlatch River Subbasin Monitoring Data, pages 148-189. CB 1/10.

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Sediment criteria found in Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. The most available water column sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.3, pages 76-79) are a monthly average of 50 mg/L TSS with a maximum daily limit of 80 mg/L to allow for natural variability. These targets are consistent with targets applied in other sediment TMDLs addressing sediment in the Lower Clearwater Subbasin. Existing sediment loads in these water bodies are shown in Section 5.3. The daily TSS load allocation data are listed on pages 80-89.
CB, 1/10.

Temperature, water **TMDL approved or established by EPA (4A)**

The Potlatch River Subbasin Assessment and TMDL has been reviewed and approved by EPA, February 13, 2009. Continuous digital recording devices were placed near the mouths of all streams listed for temperature within the water shed. Table 12, (pages 34-36) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data from IDFG, presented in Table 7 (page 20). The potential natural vegetation (PNV) method has been used to create the Potlatch River watershed temperature TMDL (pages 90-104). Point sources of Temperature are described on pages 104-107. Data are listed in Appendix C; Percent Natural Vegetation Loading Tables, pages 190-214. CB, 1/10.

Panhandle

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17010213 Lower Clark Fork

ID17010213PN004_02a	Dry Creek	9.64	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

AU included in the Lower Clark Fork TMDL in 2007 (page 96-99).

17010214 Pend Oreille Lake

ID17010214PN001_08	Pend Oreille River - Priest River to Albeni Falls Dam	3.36	MILES

Phosphorus (Total) **Applicable WQS attained; according to new assessment method**

The pollutant "Total Phosphorus" was added as a cause of impairment on the 2008 Integrated Report. The assessment was based on available information at the time. Monitoring conducted by IDEQ during the summer of 2009 did not reveal any evidence of beneficial use impairment resulting from excess TP. Monitoring results conflict with the Total Phosphorus (TP) cause added in 2008. DEQ is delisting TP from Category 5 because water quality standards are being met. DEQ will continue to evaluate Pend Oreille River status. Refer to Attachment

ID17010214PN002_08	Pend Oreille River - Pend Oreille Lake to Priest River	32.56	MILES

Phosphorus (Total) **Applicable WQS attained; according to new assessment method**

2010 - The pollutant "Total Phosphorus" was added as a cause of impairment on the 2008 Integrated Report. The assessment was based on available information at the time. Monitoring conducted by IDEQ during the summer of 2009 did not reveal any evidence of beneficial use impairment resulting from excess TP. Monitoring results conflict with the Total Phosphorus (TP) cause added in 2008. DEQ is delisting TP since the River is meeting water quality standards. DEQ will continue to evaluate Pend Oreille River status. Refer to Attachment

ID17010214PN003_02	Hoodoo Creek - source to mouth	51.84	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

ID17010214PN003_02a	Hoodoo Creek	15.68	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

ID17010214PN012_02	Cocolalla Creek - Cocolalla Lake to mouth	13.3	MILES

Combined Biota/Habitat Bioassessments **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

2010: This AU was assessed on 1/29/2010 by CDA RO Staff (R. Steed, K. Keith, T. Clyne, and K. Stromberg, R. Witherow). Cannot find the basis for the Combined Biota listing. AU should have had the cause "Sediment" identified. This AU has an EPA approved sediment TMDL in 2000.

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

ID17010214PN012_04	Cocolalla Creek - Cocolalla Lake to mouth	7.69	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

ID17010214PN014_02	Cocolalla Creek - source to Cocolalla Lake	40.66	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

ID17010214PN014_03	Cocolalla Creek - source to Cocolalla Lake	9.2	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

ID17010214PN014_04	Cocolalla Creek - source to Cocolalla Lake	0.2	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

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ID17010214PN015_03	Fish Creek - source to mouth	2.37	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN021_02	Cheer Creek	4.63	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN021_03	Gold Crk.- WGold to lake PDO	1.67	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN022_02	West Gold Creek	9.62	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN023_02	Gold Creek, headwaters to chloride gulch	6.92	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN023_03	Gold Creek	1.16	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN024_02	Chloride Creek	7.14	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN026_02	Cedar Creek	9.48	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN027_02	Granite Creek	26.56	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN027_03	Granite Creek, Lower	4.68	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN030_02	Trestle Creek - source to mouth	20.99	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN031_04	Lower Pack River - Sand Creek to mouth	19.2	MILES
Phosphorus (Total)	**TMDL approved or established by EPA (4A)**		
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN032_02	Trout Creek	10.13	MILES
Phosphorus (Total)	**TMDL approved or established by EPA (4A)**		
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN033_03	Rapid Lightning Creek, Trapper Cr to Pack R	7.8	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		

ID17010214PN034_02	Gold Creek - headwaters to Pack R	17.8	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN035_03	Grouse Creek - North Fork Grouse Creek to Pack R.	9.4	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN036_02	Grouse Creek - 1st and 2nd order tribs above NF Grouse Cr	28.57	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN036_03	Grouse Creek - Flume Cr to North Fork Grouse Cr	6.81	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN037_02	North Fork Grouse Creek - headwaters to Grouse Cr	16.69	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN038_02	Sand Creek - headwaters to Pack R	13.21	MILES
Phosphorus (Total)	**TMDL approved or established by EPA (4A)**		
ID17010214PN039_03	Upper Pack River - Hellroaring Cr to Colburn Cr	8.33	MILES
Phosphorus (Total)	**TMDL approved or established by EPA (4A)**		
TMDL approved or established by EPA (4A)			
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN039_04	Upper Pack River - Colburn Cr to Sand Creek	3.8	MILES
Phosphorus (Total)	**TMDL approved or established by EPA (4A)**		
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN041_02	Upper Pack River - tributaries above Hellroaring Cr.	56.16	MILES
Phosphorus (Total)	**TMDL approved or established by EPA (4A)**		
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN041_03	Upper Pack River - Mainstem, Zuni Cr. to Hellroaring Cr.	10.19	MILES
Phosphorus (Total)	**TMDL approved or established by EPA (4A)**		
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN042_02	McCormick Creek - headwaters to Pack R.	10.79	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN043_02	Jeru Creek - source to mouth	6.33	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		
ID17010214PN044_02	Hellroaring Creek - Headwaters to Pack R.	10.93	MILES
Temperature, water	**TMDL approved or established by EPA (4A)**		

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ID17010214PN046_03	Colburn Cr, Berry Cr to Pack R	0.36	MILES

Phosphorus (Total) **TMDL approved or established by EPA (4A)**

ID17010214PN047_02	Colburn Creek - Headwaters to Berry Cr.	8.61	MILES

Phosphorus (Total) **TMDL approved or established by EPA (4A)**

ID17010214PN048_03	Sand Creek - Schweitzer Cr to Pend Oreille L. at City Beach	4.04	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

ID17010214PN049_02	Sand Creek - tributaries above Schweitzer Creek	15.93	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

ID17010214PN049_03	Sand Creek - 3rd order portion above Schweitzer Creek	3.54	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

17010215 Priest

ID17010215PN004_02	North Fork East River - source to mouth	27.53	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

2010: This AU was assessed on 3/3/2010 by CDA RO and STO Staff (R. Steed, Marti Bridges). A Subbasin Assessment and Temperature TMDL has been prepared and approved for this AU, with an approval date of June 23, 2003.

ID17010215PN004_03	North Fork East River - source to mouth	2.22	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

17010216 Pend Oreille

ID17010216PN002_08	Pend Oreille River - Albeni Falls Dam to Idaho/Washington	3.89	MILES

Phosphorus (Total) **Applicable WQS attained; according to new assessment method**

The pollutant "Total Phosphorus" was added as a cause of impairment on the 2008 Integrated Report. The assessment was based on available information at the time. Monitoring conducted by IDEQ during the summer of 2009 did not reveal any evidence of beneficial use impairment resulting from excess TP. Monitoring results conflict with the Total Phosphorus (TP) cause added in 2008. DEQ is delisting TP from Category 5 since the River is meeting water quality standards. DEQ will continue to evaluate Pend Oreille River status. Refer to Attachment

17010301 Upper Coeur d Alene

ID17010301PN004_03	Prichard Creek - between Butte Gulch and Eagle Creek	5.45	MILES

Temperature, water **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

2010: ID17010301PN004_03. AU Name and Description changed 2/4/2010 by K. Stromberg. No DEQ or USFS temperature data could be found to evaluate temperature impairment in this reach of Prichard Creek. This AU is proposed for delisting due to original listing error. No data or documentation is available or could be found to show exceedances of temperature criteria or impairment due to temperature. 2/4/2010 K. Stromberg.

ID17010301PN005_03	Prichard Creek - between Barton Gulch to Butte Gulch	1.98	MILES

Temperature, water — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

2010: ID17010301PN005_03. AU Name and Description changed 2/4/2010 by K. Stromberg. No DEQ or USFS temperature data could be found to evaluate temperature impairment in this reach of Prichard Creek. This AU is proposed for delisting due to original listing error. No data or documentation is available or could be found to show exceedances of temperature criteria or impairment due to temperature. 2/4/2010 K. Stromberg.

ID17010301PN014_02a	Cub Creek	1.48	MILES

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

3/23/2010 - The North Fork Coeur d' Alene Subbasin TMDL was approved by EPA on 02/19/2002. See page 58 for sediment loading capacity and page 61 for sediment load allocation, AU included in the Lost Creek sediment calculations.

ID17010301PN018_03	Independence Creek, btw Ellis Cr. and Declaration Cr.	0.78	MILES

Temperature, water — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

2010: ID17010301PN018_03. AU Name and Description changed 2/11/2010 by K. Stromberg. No DEQ or USFS temperature data could be found to evaluate temperature impairment in this reach of Independence Creek. This AU is proposed for delisting due to original listing error. No data or documentation is available or could be found to show exceedances of temperature criteria or impairment due to temperature. AUs in the Independence Cr. Watershed were split during assessments in 2007-2008 and it is likely that the listing mistake occurred after split when temperature data was wrongly associated with this AU. 2/11/2010 K. Stromberg.

17010303 Coeur d Alene Lake

ID17010303PN011_02	Willow Creek - source to mouth	7.58	MILES

Sedimentation/Siltation — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

2010: Original listing for sediment was based on incomplete data set. The 1996 BURP site is missing: Wolman Pebble Count, Percent Fines, Width/Depth Ratio, Undercut Banks, Wetted Depth Measurements, Pool Quality Index and Fish parameters. Field visits in 2009 show no land use practice contributing sediment to stream. The pasture is all in fallow, and there is approx 180 feet between road and stream channel. This short AU (lless than 1 mile) is immediately downstream from CDA tribal boundary. CDA tribe is proposing that EPA delist Willow Creek above this AU based on field visits by the tribe. Assessment performed by K. Keith and R. Steed on February 25, 2010.

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ID17010303PN020_03	Fourth of July Creek - source to mouth	5.12	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

This AU was assessed on 1/8/2010 by CDA RO Staff (R.Steed, K. Keith) .

Fourth of July Creek (Assessment Unit ID17010303PN020_03) was originally listed for sediment in the 1990s when the addition of traction sand to the highway resulted in excessive sediment and impairment of beneficial uses in Fourth of July Creek near I-90. Justification for delisting sediment is based on modeling done in 1999 under the Coeur d'Alene Lake and River Subbasin Assessment (in relation to the Coeur d'Alene Lake and River Subbasin Assessment and Proposed TMDL), channel substrate and streambank data collected in 2006 during BURP monitoring, Idaho Department of Lands Cumulative Watershed Effects data, and site visits conducted in 2009-2010.
Sediment loading estimates completed under the Coeur d'Alene Lake and River Subbasin Assessment and Proposed Total Maximum Daily Load were based primarily on sources of sediment from land use types and road characteristics, and it assumed complete delivery of sediment to the stream channel. The TMDL prescribed an interim load capacity for each subwatershed equal to natural background conditions, and it determined a TMDL for sediment was not needed on Fourth of July Creek because excessive sedimentation was not found. Sediment loading in the watershed was found to be at or near background conditions.
In 1999, a Cumulative Watershed Effects assessment (CWE) was conducted by personnel from Idaho Department of Lands. The CWE process evaluates the extent to which forest practices impacts sediment delivery to the stream and recommends management actions based on the evaluation. Results of the CWE analysis gave an overall rating of sediment delivery to Fourth of July Creek as low. No CWE data has been collected since this time.
DEQ monitored Fourth of July Creek in 2006 using BURP. Based on scores from this monitoring data, this AU is not full support. However, the biological data collected on this day was questionable because flow was 0.16 cfs. At such a low flow the Hess sampler is not designed to collect macroinvertebrates, and electrofishing isn't done. Wolman pebble counts collected during this monitoring event demonstrated percent fines were 4.78 percent - well below the 20 percent fines threshold that reduces embryo survival and fry emergence. In addition, greater than 95 percent of stream banks were observed to be stable.
DEQ conducted several field visits in 2009-2011 along the entire length of this reach. The visits were done at a number of accessible reaches along the creek during different times of the year to observe the channel during high flow, after high flow, and during low flow. On each visit, visual observations were made to determine channel condition with respect to sediment transport and deposition and aquatic life use support. The survey found the study reaches, despite being highly channelized due to its proximity to I90, to be densely foliated with good stream bank stability, no channel embeddedness, and lots of habitat complexity. There were very few areas of significant bank erosion as evidenced by bare, vertical streambanks and/or sod-root overhangs. Mass wasting was also not evident at these sites. On the lower-gradient reaches of the creek, some mid-stream depositional features were present after a very high flow event in January 2011; however, they were not at an elevation within the channel that would redirect flow towards the banks during future high flow events; therefore, there is no concern for increased erosion of the channel banks at these sites.
This reach is a highly flow-altered system. The majority of this AU is channelized due to its proximity to I-90. In addition, a series of flood control structures are at the mouth of the Creek. Although flow alteration presents it's own complexities to the system, data analysis and site observations has provided weight of evidence that aquatic life use on Fourth of July Creek is not impaired by sediment.

ID17010303PN025_02	Thompson Creek	6.13	MILES

Physical substrate habitat alterations **Applicable WQS attained; due to restoration activities**

A weight of evidence has been provided that is the basis for this different assessment, which included an evaluation of existing monitoring data from Thompson Creek, and a comparison of BURP data from Thompson Creek with Carlin Creek, a neighboring watershed that currently supports its beneficial uses. It also included a GIS modeling exercise to compare sediment loading within the Thompson Creek watershed to that of the Carlin Creek watershed. Land use practices, geology, soil, and vegetation types are similar between Carlin and Thompson Creek.

Findings derived from the Watershed Assessment on Thompson Creek follow:

1) Comparison of substrate size distribution measured during BURP surveys of Thompson and Carlin Creeks suggests closeness in relative abundance of substrate size between the two watersheds.

2) A 2001 Idaho Department of Lands CWE survey gave a total sediment delivery rating for the watershed of 49.3, which is well below the "low" rating cut-off.

3) A DEQ field visit in October 2009 concluded there was no excessive bank erosion, imbeddedness, or channel incision due to grazing or other land use impacts. Stream crossings appeared to be properly sized, causing no excess bank erosion above or below crossing. The riparian zone was at or near full potential.

4) GIS modeling exercise demonstrated that sediment loads from Thompson Creek and Carlin Creek were approximately the same in the two watersheds.

In summary, monitoring, field observations, and GIS modeling show sediment is not in excessive amounts in Thompson Creek, and it is reasonable to assume full support of cold aquatic life therein.

ID17010303PN029_02	Wolf Lodge Creek - source to mouth	23.78	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

6/25/2010 (NED) - Sediment load allocations established in the Cour d'Alene Lake and River Subbasin Assessment and TMDL , approved 7/14/2000 for Wolf Lodge Creek. Refer to Section 3.0 of the TMDL for additional information.

ID17010303PN030_02	Cedar Creek - source to mouth	24.92	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

ID17010303PN030_03	Cedar Creek - source to mouth	1.46	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

17010304 St. Joe

ID17010304PN010_02	Santa Creek - source to mouth	34.22	MILES

Physical substrate habitat alterations **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN010_03	Santa Creek - source to mouth	4.18	MILES

Physical substrate habitat alterations **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN011_02	Charlie Creek - source to mouth	32.72	MILES

Physical substrate habitat alterations **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T.Clyne 6/21/10

ID17010304PN011_03	Charlie Creek - source to mouth	5.81	MILES

Physical substrate habitat alterations **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN014_02	Carpenter Creek - source to mouth	27.55	MILES

Physical substrate habitat alterations **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN014_03	Carpenter Creek - source to mouth	1.02	MILES

Physical substrate habitat alterations — **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN018_02	Middle Fork St. Maries River - source to mouth	34.26	MILES

Physical substrate habitat alterations — **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN018_03	Middle Fork St. Maries River - source to mouth	1.54	MILES

Physical substrate habitat alterations — **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN018_04	Middle Fork St. Maries River - source to mouth	4.71	MILES

Physical substrate habitat alterations — **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

ID17010304PN018_05	Middle Fork St. Maries River - source to mouth	1.39	MILES

Physical substrate habitat alterations — **Applicable WQS attained; original basis for listing was incorrect**

Removed physical substrate habitat alteration as a cause because of the completion of the sediment and temperature TMDLs for the assessment unit in 2003. Physical substrate habitat alteration was identified as a cause when the pollutant causing the impairment was unknown. During the development of the TMDLs in 2003 sediment and temperature were identified as the pollutants causing beneficial use impairment. The St. Maries River SBA and TMDL evaluated the 'physical substrate habitat alteration' cause and developed sediment and temperature TMDLs accordingly. T. Clyne 6/21/10

17010305 Upper Spokane

ID17010305PN014_02	Fish Creek - upper and tributaries, ID/WA border to Twin L.	26.69	MILES

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17010305PN014_03	Fish Creek - mainstem, Idaho/Washington border to Twin Lak	4.53	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

Salmon

17060101 Hells Canyon

ID17060101SL024_04 Wolf Creek - 4th Order 5.75 MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Wolf Creek 17060101024_04 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-10; Data sources for Wolf Creek; Lower Salmon River Subbasin Assessment, page 118.
CB, 3/10

Temperature, water **TMDL approved or established by EPA (4A)**

The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been reviewed and approved by EPA, February 9, 2010. Analysis of existing continuous temperature data documented where Idaho's temperature criteria for the cold water aquatic life beneficial use were violated. Table 11, (pages 41-44) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data presented in Table 10 (page 41). The temperature TMDL applies a potential natural vegetation approach which establishes specific shade targets for each water body based on riparian plant communities (Appendix D, shade curves, pages 131-135). CB, 3/10.

ID17060101SL025_02 Wolf Creek - 1st and 2nd Order Tributaries 22.37 MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Wolf Creek 17060101SL025_02 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-10; Data sources for Wolf Creek; Lower Salmon River Subbasin Assessment, page 118.
CB, 3/10

ID17060101SL025_03 Wolf Creek - 3rd Order 2.83 MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Wolf Creek 17060101SL025_03 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-10; Data sources for Wolf Creek; Lower Salmon River Subbasin Assessment, page 118.
CB, 3/10

ID17060101SL025_04 Wolf Creek - 4th Order 0.87 MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Wolf Creek 17060101SL025_04 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-10; Data sources for Wolf Creek; Lower Salmon River Subbasin Assessment, page 118.
CB, 3/10

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

ID17060101SL028_02	Divide Creek - 1st and 2nd order Tributaries	34.98	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Divide Creek 17060101SL028_02 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-11; Data sources for Divide Creek; Lower Salmon River Subbasin Assessment, page 119.
CB, 3/10

ID17060101SL028_03	Divide Creek - 3rd Order	11.04	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Divide Creek 17060101SL028_03 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-11; Data sources for Divide Creek; Lower Salmon River Subbasin Assessment, page 119.
CB, 3/10

Temperature, water **TMDL approved or established by EPA (4A)**

The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been reviewed and approved by EPA, February 9, 2010. Analysis of existing continuous temperature data documented where Idaho's temperature criteria for the cold water aquatic life beneficial use were violated. Table 11, (pages 41-44) lists water bodies where data shows numeric temperature criteria exceedances. Data for these water bodies have been assessed using fish species distribution data presented in Table 10 (page 41). The temperature TMDL applies a potential natural vegetation approach which establishes specific shade targets for each water body based on riparian plant communities (Appendix D, shade curves, pages 131-135). CB, 3/10.

17060201 Upper Salmon

ID17060201SL001_02	Salmon River - Pennal Gulch to Pahsimeroi River	93.32	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform changed to e-coli in WQS. 3-25-10 SR

ID17060201SL021_04	Squaw Creek - Cash Creek to mouth	7.79	MILES

Temperature, water **Applicable WQS attained; original basis for listing was incorrect**

3/11/2010 - Based on the Upper Salmon Subbasin and TMDL dated 03/19/2003, it was determined that the waterbody was fully supporting. Refer to pages 62 through 64 for justification. NED and MLB

ID17060201SL034_04	Yankee Fork Creek - source to Jordan Creek	7.05	MILES

Physical substrate habitat alterations **Applicable WQS attained; original basis for listing was incorrect**

6/28/2011 (NED) - DEQ conducted additional monitoring in July 2005 (BURPID 2005SIDFA024). According to the data, percent fines showed 10.23% of the substrate consisted of material less than or equal to 2.5mm in size. According to DEQ's Guide to Selection of Sediment Targets for Use in Idaho TMDLs, most impairment is noted when percent fines of this size are greater than 30%. Stream bank stability was determined to be excellent with 93% of the stream rated as covered and stable. Additionally, the average BURP score was 2.33 (SMI=3, SFI=2, SHI=2) which according to DEQ's WBAG is considered fully supporting its beneficial uses. This score compared to 1.67 (SMI=3, SFI=1, SHI=1) in 1995, demonstrates that water quality has improved. Therefore, DEQ proposes to delist physical substrate habitat alteration.

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

ID17060201SL131_04	Warm Spring Creek - Hole-in-Rock Creek to mouth	4.66	MILES

Cause Unknown **Applicable WQS attained; original basis for listing was incorrect**

6/28/2011 (NED) - This segment (WQLS 3019) was first listed for nutrients on the 1994 303 (d) list which was promulgated by EPA as part of the first TMDL lawsuit. EPA listed this water solely because it was listed in DEQ's 1992 305(b) Report, Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment. Although Warm Springs Creek was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, chemical). Suspected nutrient impairment was a case of best professional judgment. Then in 1995 Warm Springs Creek was monitored and determined not to be supporting its beneficial uses due to a SMI score below the minimum threshold. However, this index should not have been applied to a "warm spring systems" or a dewatered stream. The SMI was developed based on community composition and function typical of an expected reference condition. Reference conditions are persistent aquatic habitats that allow full development of aquatic communities. Temporary waters will never have similar composition and function as perennial waters. Additionally, this segment was monitored on June 26, 1995, which is outside of DEQ's index period of July through September. Furthermore, this waterbody is entirely diverted from its natural stream channel into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.
Even though there was adequate flow, because Warm Springs is a "spring" system, DEQ's monitoring data and assessment methods should not have been applied. Given the lack of listing history to explain what data was used, if any, and the fact that Warm Springs Creek is a spring versus a ground water/snow creek, DEQ proposes to delist cause unknown (nutrients).

ID17060201SL132_02	Warm Spring Creek - source to Hole-in-Rock Creek	104.66	MILES

Cause Unknown **Applicable WQS attained; original basis for listing was incorrect**

6/28/2011 (NED) - This segment (WQLS 3019) was first listed for nutrients on the 1994 303 (d) list which was promulgated by EPA as part of the first TMDL lawsuit. EPA listed this water solely because it was listed in DEQ's 1992 305(b) Report, Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment. Although Warm Springs Creek was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, chemical). Suspected nutrient impairment was a case of best professional judgment. Then in 1995 Warm Springs Creek was monitored and determined not to be supporting its beneficial uses due to a SMI score below the minimum threshold. However, this index should not have been applied to a "warm spring systems" or a dewatered stream. The SMI was developed based on community composition and function typical of an expected reference condition. Reference conditions are persistent aquatic habitats that allow full development of aquatic communities. Temporary waters will never have similar composition and function as perennial waters. Additionally, this segment was monitored on June 26, 1995, which is outside of DEQ's index period of July through September. Furthermore, this waterbody is entirely diverted from its natural stream channel into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.
Even though there was adequate flow, because Warm Springs is a "spring" system, DEQ's monitoring data and assessment methods should not have been applied. Given the lack of listing history to explain what data was used, if any, and the fact that Warm Springs Creek is a spring versus a ground water/snow creek, DEQ proposes to delist cause unknown (nutrients).

ID17060201SL132_03	Warm Spring Creek - source to Hole-in-Rock Creek	5.07	MILES

Cause Unknown **Applicable WQS attained; original basis for listing was incorrect**

6/28/2011 (NED) - This segment (WQLS 3019) was first listed for nutrients on the 1994 303 (d) list which was promulgated by EPA as part of the first TMDL lawsuit. EPA listed this water solely because it was listed in DEQ's 1992 305(b) Report, Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment. Although Warm Springs Creek was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, chemical). Suspected nutrient impairment was a case of best professional judgment. Then in 1995 Warm Springs Creek was monitored and determined not to be supporting its beneficial uses due to a SMI score below the minimum threshold. However, this index should not have been applied to a "warm spring systems" or a dewatered stream. The SMI was developed based on community composition and function typical of an expected reference condition. Reference conditions are persistent aquatic habitats that allow full development of aquatic communities. Temporary waters will never have similar composition and function as perennial waters. Additionally, this segment was monitored on June 26, 1995, which is outside of DEQ's index period of July through September. Furthermore, this waterbody is entirely diverted from its natural stream channel into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.
Even though there was adequate flow, because Warm Springs is a "spring" system, DEQ's monitoring data and assessment methods should not have been applied. Given the lack of listing history to explain what data was used, if any, and the fact that Warm Springs Creek is a spring versus a ground water/snow creek, DEQ proposes to delist cause unknown (nutrients).

ID17060201SL132_04	Warm Spring Creek - source to Hole-in-Rock Creek	6.71	MILES

Cause Unknown | **Applicable WQS attained; original basis for listing was incorrect**

6/28/2011 (NED) - This segment (WQLS 3019) was first listed for nutrients on the 1994 303 (d) list which was promulgated by EPA as part of the first TMDL lawsuit. EPA listed this water solely because it was listed in DEQ's 1992 305(b) Report, Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment. Although Warm Springs Creek was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, chemical). Suspected nutrient impairment was a case of best professional judgment. Then in 1995 Warm Springs Creek was monitored and determined not to be supporting its beneficial uses due to a SMI score below the minimum threshold. However, this index should not have been applied to a "warm spring systems" or a dewatered stream. The SMI was developed based on community composition and function typical of an expected reference condition. Reference conditions are persistent aquatic habitats that allow full development of aquatic communities. Temporary waters will never have similar composition and function as perennial waters. Additionally, this segment was monitored on June 26, 1995, which is outside of DEQ's index period of July through September. Furthermore, this waterbody is entirely diverted from its natural stream channel into a constructed channel for agriculture and for a hydroelectric project which leaves no water in the original natural stream course.
Even though there was adequate flow, because Warm Springs is a "spring" system, DEQ's monitoring data and assessment methods should not have been applied. Given the lack of listing history to explain what data was used, if any, and the fact that Warm Springs Creek is a spring versus a ground water/snow creek, DEQ proposes to delist cause unknown (nutrients).

ID17060201SL133_02	Broken Wagon Creek - source to mouth	44.79	MILES

Cause Unknown | **Applicable WQS attained; original basis for listing was incorrect**

6/30/2011 (NED) - This segment was first listed for nutrients on the 1994 303 (d) list which was promulgated by EPA as part of the first TMDL lawsuit. EPA listed this water solely because it was listed in DEQ's 1992 305(b) Report, Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment. Although Broken Wagon Creek (WQLS 3019) was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, chemical). Suspected nutrient impairment was a case of best professional judgment. Given the lack of listing history to explain what data was used, if any, DEQ proposes to delist cause unknown (nutrients).

ID17060201SL133_03	Broken Wagon Creek - source to mouth	3.17	MILES

Cause Unknown | **Applicable WQS attained; original basis for listing was incorrect**

6/30/2011 (NED) - This segment was first listed for nutrients on the 1994 303 (d) list which was promulgated by EPA as part of the first TMDL lawsuit. EPA listed this water solely because it was listed in DEQ's 1992 305(b) Report, Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment. Although Broken Wagon Creek (WQLS 3019) was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, chemical). Suspected nutrient impairment was a case of best professional judgment. Given the lack of listing history to explain what data was used, if any, DEQ proposes to delist cause unknown (nutrients).

17060202 Pahsimeroi

ID17060202SL007_04	Pahsimeroi River - Furley Road (T15S, R22E) to Meadow Cre	1.56	MILES

Sedimentation/Siltation | **TMDL approved or established by EPA (4A)**

17060203 Middle Salmon-Panther

ID17060203SL011_02	Panther Creek - Blackbird Creek to Napias Creek	6.97	MILES

Copper | **Applicable WQS attained; original basis for listing was incorrect**

12/16/2010 (NED) - Copper was erroneously listed for this assessment unit. This listing is an artifact of the Panther Creek assessment unit (ID17060203SL011_04), which both have been impacted by historical mining activities associated with the Blackbird Mine. Although mining has occured in this watershed, these mining activities did not occur within the vicinity of these second order drainages to Panther Creek. However, the 1998 BURP data does suggest there is a biological impairment on this segment. Therefore, Combined Biota/Habitat Bioassessment has been added to the 2010 Integrated Report.

ID17060203SL011_04	Panther Creek - Blackbird Creek to Napias Creek	5.5	MILES

Cause Unknown | **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

4/5/2010 (NED)- Based on monitoring data submitted by EPA, Idaho Fish and Game and the US Forest Service, it was determined that the cause of the biological impairment was copper.

ID17060203SL038_03	Dump Creek - Moose Creek to mouth	5.04	MILES

Sedimentation/Siltation — **Applicable WQS attained; due to restoration activities**

4/5/2010 (NED)- This waterbody has been hydraulically altered during the mining era Pre-1920. As a result, this channel down-cutting and massive slope failures have occurred creating a deep chasm and the alluvial deposits in the Salmon River. The USFS completed restoration work in the 1980s to stabalize and remediate the unstable slopes of Dump Creek. The cause of the impairment on Dump Creek is due to habitat alterations not sediment. Refer to pages 33-35, 54-56 and 62-63 of the Middle Salmon River-Panther Creek Subbasin Assessment and TMDL.

ID17060203SL039_07	Salmon River - Carmen Creek to North Fork Salmon River	16.81	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

6/30/2011 (NED) - Since the original assessment for the 1992 305(b) report did not conclude there is a biological impairment on this section of the Salmon River and with no readily available data to suggest there is or isn't a biological impairment, this AU should not be listed for combined biota/habitat bioassessments but rather cause unknown.

ID17060203SL041_07	Salmon River - Pollard Creek to Carmen Creek	5.95	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

6/30/2011 (NED) - Since the original assessment for the 1992 305(b) report did not conclude there is a biological impairment on this section of the Salmon River and with no readily available data to suggest there is or isn't a biological impairment, this AU should not be listed for combined biota/habitat bioassessments but rather cause unknown.

ID17060203SL042_07	Salmon River - Williams Creek to Pollard Creek	8.81	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

6/30/2011 (NED) - Since the original assessment for the 1992 305(b) report did not conclude there is a biological impairment on this section of the Salmon River and with no readily available data to suggest there is or isn't a biological impairment, this AU should not be listed for combined biota/habitat bioassessments but rather cause unknown.

ID17060203SL046_06	Salmon River - Twelvemile Creek to Williams Creek	6.43	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

6/30/2011 (NED) - Since the original assessment for the 1992 305(b) report did not conclude there is a biological impairment on this section of the Salmon River and with no readily available data to suggest there is or isn't a biological impairment, this AU should not be listed for combined biota/habitat bioassessments but rather cause unknown.

ID17060203SL047_06	Salmon River - Iron Creek to Twelvemile Creek	12.6	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

6/30/2011 (NED) - Since the original assessment for the 1992 305(b) report did not conclude there is a biological impairment on this section of the Salmon River and with no readily available data to suggest there is or isn't a biological impairment, this AU should not be listed for combined biota/habitat bioassessments but rather cause unknown.

ID17060203SL053_06	Salmon River - Pahsimeroi River to Iron Creek	9.12	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

6/30/2011 (NED) - Since the original assessment for the 1992 305(b) report did not conclude there is a biological impairment on this section of the Salmon River and with no readily available data to suggest there is or isn't a biological impairment, this AU should not be listed for combined biota/habitat bioassessments but rather cause unknown.

ID17060203SL053_07	Salmon River - Pahsimeroi River to Iron Creek	9.76	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

No data to support listing. 4-9-10 SR

17060205 Upper Middle Fork Salmon

ID17060205SL008_02	Elkhorn Creek - 1st and 2nd order	29.01	MILES

Other flow regime alterations **Applicable WQS attained; reason for recovery unspecified**

From the MF Salmon TMDL, page 116:

"Elkhorn Creek (AU ID17060205SL008_02) is listed for both sediment and temperature on the 303(d) list. This assessment unit is comprised of the first and second order tributaries of Elkhorn Creek. Figure 52 shows the watershed. Habitat Data Eighty-nine percent of Elkhorn Creek, including all of the mainstem and Middle Fork of
Elkhorn Creek, is in the FC-RONR Wilderness area and is fairly inaccessible. A DEQ stream reconnaissance in 2006 near the headwaters of North Fork Elkhorn Creek (AUID17060205SL008_02) outside the wilderness area found over 98% stable banks and 21% fines, which is comparable to reference conditions. Three age classes of bull trout were found during a fish survey of the stream at that time.

Access to the stream site was by all-terrain vehicle (ATV)—the road was not passable with a 4-wheel-drive vehicle. The road appeared to get little use, and it was necessary for the field crew to use a chain saw to get their ATV past the deadfall. An ATV bridge is in place at the stream crossing. Good in-stream cover was noted by the field crew during that survey and the field notes state that the stream area is notably lush when compared to the more arid upland surroundings. DEQ results showed full support of beneficial uses with SHI, SMI and SFI scores all scoring the highest level of 3. An old mine site was approximately 100 meters from the stream upstream of the BURP site but was not in use and there was no sediment impact to the stream from the site. Aerial photo analysis does not show any significant mass wasting events or human influenced sources of sediment. Elkhorn Creek (AU ID17060205SL008_03) near the mouth has greater than 90% stable banks, good riparian cover, and ocularly-estimated low percent fines.

Temperature data at the mouth (Figure 53) shows that Elkhorn Creek meets the state criteria for temperature for cold water aquatic life. Data was collected at the mouth of the stream, because that was the easiest access point for the study. DEQ presumed that temperatures higher in the watershed would be cooler than those collected at the mouth. An aerial photo analysis of shade showed that shade in the upper and middle reaches of Elkhorn Creek in the FC-RONR wilderness was similar to the roughly ½ mile of North Fork (NF) Elkhorn Creek that lies outside the wilderness. NF Elkhorn Creek appeared to have had a fire affect the middle reach of the stream within the wilderness area. The lower reaches generally had lower shade targets but flow through a naturally more open
area entirely within the wilderness area. Since 89% of the watershed lies in a wilderness area and the non-wilderness portions of Elkhorn Creek are within the same range of existing shade as the wilderness area, it is
presumed that Elkhorn Creek meets the criteria for natural background temperature"

Hawk Stone

Sedimentation/Siltation **Applicable WQS attained; reason for recovery unspecified**

Temperature, water **Applicable WQS attained; reason for recovery unspecified**

ID17060205SL012_02a	Upper Bear Valley Creek and tributaries - 1st and 2nd order	28.86	MILES

Sedimentation/Siltation **TMDL Alternative (4B)**

6/23/2010 - The Bear Valley Creek 4b Justification, dated June 2010, and supporting documentation can be viewed on DEQs Website:
http://www.deq.idaho.gov/water/data_reports/surface_water/tmdls/salmon_river_mf/salmon_river_mf.cfm#bear

ID17060205SL012_03	Bear Valley Creek - 3rd order	2.08	MILES

Sedimentation/Siltation **Applicable WQS attained; due to restoration activities**

Sediment delisted based on MF Salmon TMDL, pages 106-110:
2004 DEQ BURP results for AU ID17060205SL012_03 showed an average of 20% surface fines and 97% stable banks, which are comparable to reference conditions. Additional wolman pebble counts and bank stability measurements in 2007 in Bear Valley Creek downstream of Sheep Trail Creek in this AU showed an average of 23%
fines and 97% stable banks in the third order reach. Again, these measurements are comparable to reference conditions. Both 2004 and 2007 width/depth measurements were higher than reference conditions, indicating that Bear Valley Creek is wider and shallower than a more pristine stream, likely due to sediment related perturbation.
Currently, in this section, sediment is being transported through this reach without excess amounts accumulating in potential spawning areas. The streambanks are stable and are not contributing excess sediment to either this reach or downstream reaches.

In summary, the 3rd order AU of Bear Valley Creek (ID17060205SL012_03) is meeting sediment targets and BURP data shows that it supports beneficial uses. This AU is proposed for delisting in the MF Salmon TMDL.

HS

ID17060205SL012_05	Bear Valley Creek - 5th order	11.24	MILES

Sedimentation/Siltation — **TMDL Alternative (4B)**

6/23/2010 - The Bear Valley Creek 4b Justification, dated June 2010, and supporting documentation can be viewed on DEQs Website: http://www.deq.idaho.gov/water/data_reports/surface_water/tmdls/salmon_river_mf/salmon_river_mf.cfm#bear

ID17060205SL013_03	Bearskin Creek - 3rd order (Little Beaver to Elk Creek)	1.83	MILES

Sedimentation/Siltation — **TMDL Alternative (4B)**

6/23/2010 - The Bear Valley Creek 4b Justification, dated June 2010, and supporting documentation can be viewed on DEQs Website: http://www.deq.idaho.gov/water/data_reports/surface_water/tmdls/salmon_river_mf/salmon_river_mf.cfm#bear

ID17060205SL024_02	Marsh Creek - source to Knapp Creek	20.71	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

5/27/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, approved 2/13/2009, it was determined that the cause of the biological impairment (Combined Biota/Habitat Bioassessments) was elevated temperature. The "biota" impairment is therefore replaced by temperature. For additional information refer to page xxii and for load allocations refer to Section 5.4 on page 160.

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17060205SL026_02	Asher Creek - source to mouth	3.34	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

6/02/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that the cause of the biological impairment (Combined Biota/Habitat Bioassessments) was due to low flow alterations.

ID17060205SL027_02	Unnamed Tributary - source to mouth (T12N, R11E, Sec. 11)	1.62	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

5/26/2010 (NED) - During the development of the Middle Fork Salmon River Subbasin Temperature TMDL, it was determined that the cause of the biological impairment (Combined Biota/Habitat Bioassessments) was due to low flow alterations.

ID17060205SL028_02	Beaver Creek - Bear Creek to mouth	14.13	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

6/27/2011 (NED) - Based on BURP data collected from two sites in 1997, this AU received an average score of two (2) for each site. According to DEQ's Water Body Assessment Guidance, an average score of greater than or equal to 2 is considered fully supporting.

17060209 Lower Salmon

ID17060209SL003_02	Cottonwood Creek - source to un-named tributary	22.65	MILES

Sedimentation/Siltation — **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and submitted to EPA July 21, 2009. In the SBA, the Cottonwood Creek 17060209SL 003_02 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-2; Data sources for Cottonwood Creek; Lower Salmon River Subbasin Assessment, page 110.
CB, 2/10

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

ID17060209SL004_02	Billy Creek - source to mouth	5.16	MILES

Combined Biota/Habitat Bioassessments **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

7/16/2010 (NED)-During the development of the Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment and TMDLs, data was collected on total suspended solids which identified sediment to be in concentrations greater than the load capacity. Therefore, Sediment has been added and moved to Category 4a and Combined Biota/Habitat Bioassessments has been delisted due to a listing error.

3/2010 (CB)-The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been reviewed and approved by EPA, February 9, 2010. Billy Creek (page 9) was listed in Category 5 of the 2008 Integrated Report as not meeting state water quality standards due to combined biota/habitat bioassessments because of failing BURP scores. Data collected in Billy Creek (total suspended solids), identified sediment in concentrations greater than the load capacity. Sediment in the Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. Sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). Sediment TMDL is described on pages 58-59. The targets used to develop the loading calculations are a monthly average of 25 mg/L TSS with a maximum daily limit of 50 mg/L to allow for natural variability. A summary of the collected TSS concentrations is shown in Table 20; raw data for Billy Creek is contained in Appendix B, Table B-1, page 109; the daily TSS load allocation data are on page 60.

ID17060209SL007_02	Rice Creek - tributaries	55.28	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Rice Creek 17060209SL007_02 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-4; Data sources for Rice Creek; Lower Salmon River Subbasin Assessment, page 112.
CB, 3/10

ID17060209SL028_03	Allison Creek - 3rd Order	2.72	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Allison Creek 17060209SL028_03 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-3; Data sources for Allison Creek; Lower Salmon River Subbasin Assessment, page 111.
CB, 3/10

ID17060209SL056_04	Rock Creek - 4th Order	3.73	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been approved by EPA, February 9, 2010. Data collected in Rock Creek (total suspended solids), identified sediment in concentrations greater than the load capacity. Sediment in the Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. Sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.2, page 58) are a monthly average of 25 mg/L TSS with a maximum daily limit of 50 mg/L to allow for natural variability. Daily TSS load allocation for Rock Creek is located in Table 23, pages 61-62. A summary of the collected TSS concentrations is shown in Table B-5, page 113.
CB, 3/10.

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ID17060209SL057_02	John's Creek - 1st and 2nd order tributaries	44.3	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been reviewed and approved by EPA, February 9, 2010. Data collected in John's Creek identified sediment in concentrations greater than the load capacity. Sediment in the Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. Sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.2) are a monthly average of 25 mg/L TSS with a maximum daily limit of 50 mg/L to allow for natural variability. A summary of the collected TSS concentrations is shown in Table 20; daily TSS load allocation for John's Creek are listed on page 61. Data sources for John's Creek, Appendix B, Table B-7, page 115.
CB, 3/10.

ID17060209SL057_03	Rock Creek - 3rd Order	6.56	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been approved by EPA, February 9, 2010. Data collected in Rock Creek (total suspended solids), identified sediment in concentrations greater than the load capacity. Sediment in the Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. Sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.2, page 58) are a monthly average of 25 mg/L TSS with a maximum daily limit of 50 mg/L to allow for natural variability. Daily TSS load allocation for Rock Creek is located in Table 23, pages 61-62. A summary of the collected TSS concentrations is shown in Table B-5, page 113.
CB, 3/10.

ID17060209SL058_02	Grave Creek - headwaters to unnamed tributary	27.44	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Grave Creek 17060209SL058_02 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-6; Data sources for Grave Creek; Lower Salmon River Subbasin Assessment, page 114.
CB, 3/10

ID17060209SL058_03	Grave Creek - unnamed trib to Rock Creek	3.38	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Divide Creek 17060209SL058_03 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-6; Data sources for Grave Creek; Lower Salmon River Subbasin Assessment, page 114.
CB, 3/10

ID17060209SL060_02	Deep Creek - source to unnamed tributary	28.3	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been reviewed and approved by EPA, February 9, 2010. E. coli bacteria in Deep Creek are above the 30-day geometric mean used to identify impairement during their most critical time periods (Section 2.4). The E. coli bacteria TMDL, section 5.1, is described on pages 56-58. Data for Deep Creek are listed in Appendix B, Table B-8, page 116.
CB 1/10.

Nutrient/Eutrophication Biological Indicators — **Applicable WQS attained; original basis for listing was incorrect**

In the Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs, nutrient data for Deep Creek are found in Section 2.4, summary and analysis of existing water quality data, pages 45-46. Table 12, page 45, lists sample date, flow, dissolved oxygen, total phosphorus and nitrite+nitrate as nitrogen data for Deep Creek. CB, 3/10.

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

The Lower Salmon River and Hells Canyon Tributaries Assessments and TMDLs have been reviewed and approved by EPA, February 9, 2010. Data collected in Deep Creek identified sediment in concentrations greater than the load capacity. Sediment in the Idaho Water Quality Standards (IDAPA 58.01.02) is narrative, and Idaho has a requirement that sediment shall be limited to a quantity that does not impair beneficial uses. Sediment data for application in this TMDL are reported in terms of total suspended solids (TSS). The targets used to develop the loading calculations (Section 5.2) are a monthly average of 25 mg/L TSS with a maximum daily limit of 50 mg/L to allow for natural variability. A summary of the collected TSS concentrations is shown in Table 20; daily TSS load allocation for Deep Creek are listed on page 62-63. Data sources for Deep Creek, Appendix B, Table B-8, page 116.
CB, 3/10.

Temperature, water — **Applicable WQS attained; original basis for listing was incorrect**

Analysis of the existing continuous temperature data showed that Idaho's temperature criteria for the cold water aquatic life beneficial use was not violated for Deep Creek. Summary and analysis of existing water quality data are described in section 2.4, pages 40-41. Table B-8, data sources for Deep Creek; Lower Salmon River Subbasin Assessment, page 116. CB 3/10.

ID17060209SL062_02	Deer Creek - tributaries	20.87	MILES

Sedimentation/Siltation — **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Deer Creek 17060209SL062_02 assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-2; Data sources for Deer Creek; Lower Salmon River Subbasin Assessment, page 117.
CB, 2/10

ID17060209SL062_02a	Deer Creek - source to WF Deer Creek	26.89	MILES

Sedimentation/Siltation — **Applicable WQS attained; original basis for listing was incorrect**

The Lower Salmon River and Hells Canyon Tributaries Subbasin Assessment (SBA) and TMDL was completed and approved by EPA February 9, 2010. In the SBA, the Deer Creek 17060209SL062_02a assessment unit was found to be meeting water quality standards and sediment is not impairing the cold water aquatic life beneficial use.
Section 2.3, Pollutant/Beneficial Use Support Status Relationship for sedment, pages 31-32.
Section 2.4, Summary and Analysis of Exiting Water Quality Data for Sediment (Total Suspended Solids) page47-48.
Section 3.1, Nonpoint sources, pollutant source inventory, sediment, page 52.
Section 4, Summary of Past and Present Pollution Control Efforts, Nonpoint sources, pages 53-54.

Appendix B, Table B-2; Data sources for Deer Creek; Lower Salmon River Subbasin Assessment, page 117.
CB, 2/10

17060210 Little Salmon

ID17060210SL001_02	Little Salmon River - 1st and 2nd order below Round Valley	98.51	MILES

Sedimentation/Siltation **Applicable WQS attained; reason for recovery unspecified**

This assessment unit was not listed based upon any data, rather it was probably subsumed under a larger listing of 'Little Salmon River, Source to Mouth'. A note in the assessment unit said that "Data exists to indicate spawning and rearing of salmonid species in this AU. However, since the data is not current, DEQ will put this assessment unit back in category 5 for sediment and conduct BURP inventory (s) of representative stream(s) in this AU to determine beneficial use support."

BURP inventory was completed in July 2007, and indicates that this assessment unit fully supports the beneficial uses of Cold Water Aquatic Life and Secondary Contact Recreation.

Southwest

17050101 C. J. Strike Reservoir

ID17050102SW001L_0L	CJ Strike Reservoir - Bruneau Arm	2053.44	ACRES

Oxygen, Dissolved **TMDL approved or established by EPA (4A)**

The Snake-River-King-Hill TMDL also applies to the Bruneau arm of CJ Strike Reservoir. HS

Phosphorus (Total) **TMDL approved or established by EPA (4A)**

The TMDL also addressed the Bruneau arm of CJ Strike Reservoir.

17050102 Bruneau

ID17050102SW001L_0L	CJ Strike Reservoir - Bruneau Arm	2053.44	ACRES

Oxygen, Dissolved **TMDL approved or established by EPA (4A)**

The Snake-River-King-Hill TMDL also applies to the Bruneau arm of CJ Strike Reservoir. HS

Phosphorus (Total) **TMDL approved or established by EPA (4A)**

The TMDL also addressed the Bruneau arm of CJ Strike Reservoir.

ID17050102SW002_05	Jacks Creek - 5th order (Little Jacks Creek to mouth)	12.28	MILES

Oxygen, Dissolved **Applicable WQS attained; original basis for listing was incorrect**

DO is an observed effect, not a pollutant. HS

17050103 Middle Snake-Succor

ID17050103SW002_03	Sage Creek - 3rd order	7.53	MILES

Cause Unknown **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

The mid-snake succor TMDL identified the cause of impairment as e. coli bacteria. HS

Escherichia coli **TMDL approved or established by EPA (4A)**

ID17050103SW006_03	Snake River - 3rd order unnamed tributaries near Sinker Cr.	7.46	MILES

Sedimentation/Siltation **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

This assessment unit was listed in error. It was 'dragged' into the 303(d) list on the back of the larger Snake River section, which it (erroneously) shares a small piece of.
HS

ID17050103SW006_07	Snake River - C.J. Strike Dam to Castle Creek	23.74	MILES

Sedimentation/Siltation **Applicable WQS attained; reason for recovery unspecified**

From the Mid-Snake Succor TMDL, page 72:

Both TSS and SSC have been monitored in the Snake River. As shown in Figures 2.7 through 2.10 and Table 10, except during spring runoff, instream concentrations are generally below the 50 mg/L target set in the SR-HC TMDL.

DEQ monitored both SSC and TSS and found a .94 coefficient or determination (R2) both annually and during the irrigation season. This finding suggests that the suspended sediment samples are made primarily of silt material and not dominated by sand-sized or larger particles. Thus, the 50 mg/L target for SSC can be applied to TSS data.
The sediment data outlined above indicate that water column sediment is not impairing beneficial uses. Thus, DEQ recommends that the mainstem Snake River from CJ Strike to the Idaho/Oregon border be delisted for sediment.

HS

ID17050103SW012_04	Sinker Creek - 4th order	16.22	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

The Mid-Snake River/Succor Creek Subbasin Assessment and TMDL was reviewed and approved by EPA on January 5, 2004. Sinker Creek requires a 12% shade increase to meet the load allocation of 3.49 J/m2/sec. For additional information, refer to pages 158, 163 and Table 53 on page 181 in the TMDL. HS

ID17050103SW025_03	Corder Creek - 3rd order	9.07	MILES

Combined Biota/Habitat Bioassessments **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

Corder Creek has never been surveyed by DEQ's BURP monitoring system, and no other biota assessment is available. This assessment unit was listed in error. HS

17050107 Middle Owyhee

ID17050107SW011_03	Cabin & Corral Creeks - 3rd order sections	2.59	MILES

Escherichia coli **Applicable WQS attained; original basis for listing was incorrect**

From the North and Middle Fork Owyhee River TMDL Review, page 12:

The third order section of Cabin and Corral Creeks (ID17050107SW011_03) is incorrectly listed as 'not fully supporting' secondary contact recreation. Prior to 2006, no bacteria data had ever been received for this assessment unit, because it is very hard to get to. In 2006, DEQ's BURP crew hiked down a steep canyon wall, and took a bacteria sample, which indicated 8.5 CFU of E. coli bacteria were present, far less than the 576 CFU required for follow-up sampling.

HS

17050108 Jordan

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ID17050108SW001_02 Lower Jordan Creek - 1st and 2nd order tributaries 34.37 MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

This assessment unit represents the small 1st and 2nd order tributaries to lower Jordan Creek (i.e. downstream of Williams Creek). It is mostly intermittent streams, with the only named stream being Stonehouse Gulch.

When Jordan Creek was placed on the 303(d) list, this assessment unit was 'involuntarily' caught up with that listing. There are no data to indicate whether the beneficial uses on this assessment unit are supported or not. Future monitoring is recommended, but until then, the assessment unit should be 'unassesed'.

From the Jordan Creek TMDL, page xxix:
"The analysis of water, sediment, and fish tissue results show the contamination is not a watershed issue as a whole, but is confined to the Jordan Creek water body itself."

Hawk Stone

Fecal Coliform — **Applicable WQS attained; original basis for listing was incorrect**

Mercury — **Applicable WQS attained; original basis for listing was incorrect**

Oil and Grease — **Applicable WQS attained; original basis for listing was incorrect**

Sedimentation/Siltation — **Applicable WQS attained; original basis for listing was incorrect**

ID17050108SW004_02 Upper Jordan Creek - 1st and 2nd order tributaries 102.44 MILES

Cause Unknown — **Applicable WQS attained; according to new assessment method**

The Jordan TMDL identified the causes of pollultion as mercury and temperature, and so the 'cause unknown' is being removed. HS

Fecal Coliform — **Applicable WQS attained; according to new assessment method**

From Jordan Creek TMDL, page xxi

"Bacteria levels in Upper Jordan Creek are meeting water quality standards. The listing of oil and grease as a pollutant of concern indicates that portions of the general surface water criteria are not being met. However, the sample results met water quality standards and did not show concentrations of concern."

Hawk Stone

Oil and Grease — **Applicable WQS attained; according to new assessment method**

Sedimentation/Siltation — **Applicable WQS attained; according to new assessment method**

From Jordan Creek TMDL, page xxviii:

"Additionally, an evaluation of the stream substrate, physical and habitat conditions do not show impairment."

HS

ID17050108SW004_03 Jordan Creek - 3rd order (Jacobs Gulch to Louse Creek) 13.43 MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

The Jordan Creek TMDL identified the sources of pollution as Temperature and Mercury, and so the 'cause unknown' is now known. HS

Fecal Coliform — **Applicable WQS attained; according to new assessment method**

The Jordan Creek TMDL says that "Bacteria levels in Upper Jordan Creek are meeting water quality standards." (page xxix) HS.

Oil and Grease — **Applicable WQS attained; according to new assessment method**

From the Jordan Creek TMDL, page xxix:

"The listing of oil and grease as a pollutant of concern indicates that portions of the general surface water criteria are not being met. However, the sample results met water quality standards and did not show concentrations of concern."

Sedimentation/Siltation — **Applicable WQS attained; according to new assessment method**

The Jordan Creek TMDL says that "an evaluation of the stream substrate, physical and habitat conditions do not show impairment." (page xxviii) HS

ID17050108SW004_05	Jordan Creek - Big Boulder Creek to Williams Creek	3.37	MILES

Cause Unknown — **Applicable WQS attained; according to new assessment method**

The Jordan TMDL identified the causes of pollution as temperature and mercury, and so the unknown cause is no longer unknown. HS

Fecal Coliform — **Applicable WQS attained; according to new assessment method**

The Jordan Creek TMDL says "Bacteria levels in Upper Jordan Creek are meeting water quality standards" (page xxix) HS

Oil and Grease — **Applicable WQS attained; according to new assessment method**

The Jordan Creek TMDL, page xxix, says "The listing of oil and grease as a pollutant of concern indicates that portions of the general surface water criteria are not being met. However, the sample results met water quality standards and did not show concentrations of concern"

HS

Sedimentation/Siltation — **Applicable WQS attained; according to new assessment method**

The Jordan Creek TMDL says "Additionally, an evaluation of the stream substrate, physical and habitat conditions do not show impairment." (page xxviii) HS

ID17050108SW013_02	Rock Creek above Triangle Reservoir - 1st and 2nd order	64.23	MILES

Sedimentation/Siltation — **Applicable WQS attained; according to new assessment method**

6/27/2011 (NED) - During the development of the Jordon Creek TMDL, data collected in 2003 from a BURP site (2003SBOIA010) located downstream of this 2nd order segment showed the stream bank stability to be excellent with 90% of the stream rated as covered and stable. Percent fines recorded in 2003 showed that 27% of the substrate consisted of material less than or equal to 2.5mm in size. According to DEQ's Guide to Selection of Sediment Targets for Use in Idaho TMDLs, most impairment is noted when percent fines of this size make up greater than 30% of the substrate. Periphyton samples collected in 2003 indicate only minor stress possibly associated with siltation. Furthermore, the SMI "Condition Rating" from macroinvertebrate samples collected from two downstream sites in 1998, although collected outside of DEQ's index period, was a "3" and the 2003 site's SMI "Condition Rating" was a "2". According to DEQ's Water Body Assessment Guidance these condition ratings indicate a healthy macroinvertebrate community. Therefore, DEQ is delisting this AU for sediment since impacts from sediment are not readily apparent.

ID17050108SW021_02	Cow Creek - 1st and 2nd order	55.12	MILES

Sedimentation/Siltation — **Applicable WQS attained; according to new assessment method**

Jordan TMDL, page 57:

"In Cow Creek, 70% of the macroinvertebrate assemblage was dominated by five taxa. Using a sediment tolerant-intolerant species indicator, or the fine sediment bioassessment index (FSBI) developed by Relyea, Minshall and Danehy (2000), a majority (80%) of the species have an assigned FSBI value which indicates the macroinvertebrate assemblage is moderately intolerant to fine sediment."

"The BLM also collected samples for total suspended solids (TSS) and total solids (TS) in 1977. Neither sample showed concentrations that would indicate a water quality concern for sediments."

HS

ID17050108SW021_03	Cow Creek - 3rd order (Wildcat Canyon to Soda Creek)	3.42	MILES

Sedimentation/Siltation — **Applicable WQS attained; according to new assessment method**

Jordan TMDL, page 57:

"In Cow Creek, 70% of the macroinvertebrate assemblage was dominated by five taxa. Using a sediment tolerant-intolerant species indicator, or the fine sediment bioassessment index (FSBI) developed by Relyea, Minshall and Danehy (2000), a majority (80%) of the species have an assigned FSBI value which indicates the macroinvertebrate assemblage is moderately intolerant to fine sediment."

"The BLM also collected samples for total suspended solids (TSS) and total solids (TS) in 1977. Neither sample showed concentrations that would indicate a water quality concern for sediments."

HS

17050111 North And Middle Fork Boise

ID17050111SW001_02	MF Boise River - 1st and 2nd order forested tributaries	199.79	MILES

Arsenic — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

Data were provided by Idaho Conservation League that show the drinking water, and contact recreation standards for Arsenic were violated 85% of the time below a 100m mixing zone on Montezuma Creek, which is no longer part of this assessment unit.

The Montezuma Creek assessment unit (ID17050111SW001_02b) has been listed for arsenic impairment.

12/8/09 HS.

ID17050111SW014_03	Crooked River, Pikes Fork and Beaver Creek - 3rd order	3.86	MILES

Sedimentation/Siltation — **Applicable WQS attained; threatened water no longer threatened**

DEQ listed Crooked River as 'threatened' based upon our 2000 Subbasin Assessment. Recent monitoring data (BURP) indicates that the beneficial uses are in fact fully supported.

It was never intended to place this stream on the 303(d) list, only to classify it as 'threatened'.

Hawk Stone

ID17050111SW016_02	Meadow Creek - 1st and 2nd order	7.28	MILES

Sedimentation/Siltation — **Applicable WQS attained; threatened water no longer threatened**

DEQ listed Meadow Creek as 'threatened' based upon our 2000 Subbasin Assessment. Recent monitoring data (BURP) indicates that the beneficial uses are in fact fully supported.

It was never intended to place this stream on the 303(d) list, only to classify it as 'threatened'.

Hawk Stone

ID17050111SW017_02	French Creek - entire watershed	10.83	MILES

Sedimentation/Siltation — **Applicable WQS attained; threatened water no longer threatened**

DEQ listed French Creek as 'threatened' based upon our 2000 Subbasin Assessment. Recent monitoring data (BURP) indicates that the beneficial uses are in fact fully supported. 2008 perfect 3/3/3 BURP score.

It was never intended to place this stream on the 303(d) list, only to classify it as 'threatened'.

Hawk Stone

17050112 Boise-Mores

ID17050112SW009_02	Mores Creek - 1st and 2nd order	133.17	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; according to new assessment method**

The Mores Creek TMDL identified the cause of the biota impairment as sediment, temperature and flow alteration. HS

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050112SW009_03	Mores Creek - 3rd order (Hayfork Creek to Elk Creek)	12.29	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

ID17050112SW009_04	Mores Creek - 4th order (Elk Creek to Grimes Creek)	8.84	MILES

Cause Unknown — **Applicable WQS attained; reason for recovery unspecified**

The Mores Creek TMDL identified the cause of impairment as temperature, sediment and flow alteration. Hence the unknown cause is no longer unknown. HS

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; reason for recovery unspecified**

The Mores Creek TMDL identified the cause of biota impairment as temperature, sediment and flow alteration. Hence this cause is being replaced with the more specific information. HS

Fishes Bioassessments — **Applicable WQS attained; reason for recovery unspecified**

Habitat Assessment (Streams) — **Applicable WQS attained; reason for recovery unspecified**

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050112SW009_06	Mores Creek - 6th order (Grimes Creek to mouth)	9.36	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050112SW013_02	Grimes Creek - 1st and 2nd order	153.46	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; reason for recovery unspecified**

The Mores Creek TMDL identified the source of biota impairment as temperature. The 'biota' impairment is therefore replaced by temperature. HS

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050112SW013_04	Grimes Creek - 4th order (Clear Creek to Granite Creek)	9.53	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050112SW013_05	Grimes Creek - 5th order (Granite Creek to mouth)	14.65	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; reason for recovery unspecified**

The Mores Creek TMDL identified the cause of the biota impairment as temperature, sediment and habitat alteration. I have replaced the 'biota' cause with the actual causes. HS

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

17050113 South Fork Boise

2010 Integrated Report: Assessment Unit-Cause Combinations Delisted

ID17050113SW004_02	SF Boise River (Anderson Dam to Arrowrock) - 1st & 2nd orde	153.4	MILES

Sedimentation/Siltation — **Applicable WQS attained; reason for recovery unspecified**

From the SF Boise TMDL, page 43:

The 2nd order AU (004_02) was listed on the 2008 Integrated Report as impaired by unknown pollutants. The data from 1998 BURP surveys for two streams in this AU Cayuse Creek and Rough Creek, resulted in scores below 2.0. Rough Creek had a low canopy cover score and a low bank stability percentage, indicating that sediment may be the cause of impairment. Rough Creek was sampled for subsurface fine sediment in 2008, with results showing 7% subsurface fine sediment, which is well below the recommended limit of 27% subsurface fines. In addition, the banks appeared to be mostly covered and stable with a well-developed riparian community and adequate canopy cover consisting mainly of willow and mixed grasses (see photos 11 and 12 in Appendix I). Cayuse Creek was determined to be intermittent, meaning that it usually dries up for a portion of the summer. When the scores from the 1998 Cayuse Creek sample are omitted, the average scores for the other BURP sites (Rough Creek) indicate full support of beneficial uses.

HS 1/8/10

ID17050113SW005_02	Tributaries to Anderson Ranch Reservoir - 1st and 2nd order	81.96	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

From the SF Boise TMDL, page 45:

Goat and Lester Creeks are intermittent streams and usually dry up in the summer. Because beneficial uses cannot be attained in these stream segments. only the data from Evans and Wilson Creeks will be used to assess the status of this AU. Evans Creek was sampled in 1998 and 2007. Although the macroinvertebrate sampling results from the 2007 sample will not be available until the fall of 2008, it is presumed that the result will not alter the overall conclusion of this assessment. According to the BURP data, this AU is fully supporting beneficial uses and no TMDL is necessary at this time.

HS

ID17050113SW007L_0L	Little Camas Reservoir	966.18	ACRES

Sedimentation/Siltation — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

Based on monitoring throughout the summer of 2009, the source of impairment was determined not to be sediment, but rather low water levels and the resulting algal blooms.

HS

ID17050113SW010_05	Lime Creek - 5th order	4.07	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050113SW015_02	SF Boise River - 1st and 2nd order tribs,Willow to Big Smoky	60.98	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; reason for recovery unspecified**

This assessment unit was originally placed on the 303(d) list because of a failed 1998 BURP site in Big Water Gulch.

The TMDL (page 48) says:
The USFS has completed several habitat improvement projects in this water body unit since 2000. These include culvert replacements for fish passage, trail ford rehabilitation, and dispersed recreation rehabilitation. ... The average BURP survey score for the 2nd order AU is 2.0, indicating full support of beneficial uses... BURP data suggests that this water body unit is fully supporting beneficial uses. No TMDL is necessary at this time.

A 2008 BURP site on Kelley Creek scored a rare perfect 3/3/3 score, and indicates that the assessment unit fully meets its beneficial uses.

Hawk Stone

ID17050113SW018_03	Little Smoky, Salt & Grindstone Creeks - 3rd order sections	10.99	MILES

Cause Unknown — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

From TMDL, page 50:

Although Grindstone Creek (2004STWF034) had data that produced low scores in 2004, data from that survey did show low fine sediment, high bank stability, and adequate canopy cover. The survey done in 2005 (2005STWF011) was done upstream of the 2004 sample and scored very high in SMI, SHI, and SFI. Other 3rd order streams in the area had scores that suggest full support of beneficial uses. No TMDL is necessary at this time.

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

Habitat Assessment (Streams) — **Applicable WQS attained; due to restoration activities**

From the TMDL, page 50:

Although Grindstone Creek (2004STWF034) had data that produced low scores in 2004, data from that survey did show low fine sediment, high bank stability, and adequate canopy cover. The survey done in 2005 (2005STWF011) was done upstream of the 2004 sample and scored very high in SMI, SHI, and SFI. Other 3rd order streams in the area had scores that suggest full support of beneficial uses. No TMDL is necessary at this time.

ID17050113SW032_03	Smith Creek - 3rd order (Mule Gulch to SF Boise River)	16.45	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; reason for recovery unspecified**

From the SF Boise TMDL, page 53:

Smith Creek is listed for unknown pollutants in the 3rd order stream segment. Some non-Tier I BURP scores indicate that sediment may be a pollutant of concern for this segment. Core sampling of subsurface fine sediment showed an average of 24% fine sediment, which is below the recommended limit of 27%. BURP assessments of 3rd order Smith Creek show relatively high values of bank stability (84% in 1999, 97% in 2006). Sediment does not appear to be impairing the beneficial uses of 3rd order Smith Creek. Satellite imagery shows nine constructed flow and habitat alterations on the 3rd order AU of Smith Creek. Much of lower Smith Creek is dewatered for several months each summer.

The TMDL identified the problem in Smith Creek as temperature and flow alteration. In delisting this assessment unit for the 'Combined Biota' cause, I will re-list it with Temperature and flow alteration as the cause. HS

17050114 Lower Boise

ID17050114SW003_04	Indian and Sand Creeks - 4th order above 11th Ave. in Nampa	27.26	MILES

Cause Unknown — **Applicable WQS attained; reason for recovery unspecified**

Lower Boise TMDL has identified the cause of impairment as temperature. HS

Sedimentation/Siltation — **Applicable WQS attained; reason for recovery unspecified**

Data collected by BOR in 1999 document SSC between 1 and14 mg/L and DO from 7.0 to 12 mg/L (pg. 173). Data collected in 2008 document DO between 8.29and 11.0 mg/L, and SSC between 4.9 and 7.0 mg/L (pg. 179). All WQS criteria are met. Susan Beattie.

ID17050114SW004_06	Lake Lowell	6056.53	ACRES

Cause Unknown — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

Lake Lowell TMDL indicates that the 'unknown' impairment is actually Total Phosphorus. HS

ID17050114SW005_06a	Boise River-Star to Middleton	11.3	MILES

Phosphorus (Total) — **Applicable WQS attained; original basis for listing was incorrect**

9/7/2010 (NED) - Per EPA's letter dated 10/13/2009, regarding the final list of water and pollutant that EPA is adding to DEQ's final 2008 IR, DEQ has reexamined all the available data and information concerning the waters originally included in WQLS 2727 (now included in AU ID17050114SW005_06a and 06b). Based on that review, DEQ has concluded that the segment from Middleton to Indian Creek is impaired for total phosphorus. However, there is insufficient data to conclude that the reach from Star to Middleton has a nutrient impairment. Therefore, until there is sufficient data to suggest there is a nutrient impairment, DEQ is proposing to delist TP from AU17050114SW005_06a. The following reports were used in the aforementioned assessments:

MacCoy, D.E. 2004. Water-quality and biological conditions in the Lower Boise River, Ada and Canyon Counties, Idaho, 1994-2002. USGS Report 2004-5128.

IDEQ 2001. Lower Boise River Nutrient Subbasin Assessment.

ID17050114SW010_03	Fivemile Creek - 3rd order	22.64	MILES

Cause Unknown — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

'Cause Unknown' has been identified as sedimentation. HS

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

'Cause Unknown' and the cause of the impaired biota has been identified as sedimentation. HS

Fishes Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

Habitat Assessment (Streams) — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

ID17050114SW011a_06	Boise River - Diversion Dam to River Mile 50	22.54	MILES

Sedimentation/Siltation — **Applicable WQS attained; due to restoration activities**

Sediment levels are no longer impairing beneficial uses in this part of the Boise River:

USGS data collected between 2003 and 2008 document suspended solids concentrations ranges from 2 to 45 mg/L with 90% of samples <18 mg/L and annual average of 8 mg/L (Refer to pg. 145-148 of the LBR TMDL Five-Year Review). According to the technical appendices of the Lower Boise River TMDL (1999) document that COLD is no longer impaired by sediment when TSS is < 20 mg/L. (Susan Beattie) HS

An email from Robbin Finch, water quality manager for the City of Boise says:

We concur and support IDEQ proposed delisting of the Boise River from Diversion Dam to Eagle Island in the 2010 Integrated Report. Boise City collects TSS data monthly at three locations in the reach, Veteran's Bridge, Glenwood Bridge, and South Channel at Eagle Road (see attached) for NPDES purposes. The data show a decrease in TSS concentration at all three sites. The data are high quality, USGS equal width sampling procedures, standard SOPs, and USGS audit of sample collection protocols every three years. The TSS decrease appear to be largest at the Glenwood and Eagle Road sites over the period 2000-2010. We are also normalizing the data to flow, which we anticipate this will result in a better understanding of the data at all three sampling locations.
During our discussion on the proposed delisting of the Boise River for sediment for the Diversion Dam to Eagle Island reach, I suggested there were additional causes beyond "restoration activities" that contributed to the observed decrease in sediment, particularly the issuance and implementation of the Boise MS4 permit in 2000.

...

The [most] likely cause of the decrease in sediment is implementation of the stormwater program, including the 2000 Boise MS4 permit, Industrial (MSGP), and Construction (CGP). For this reach of the river, we anticipate the Boise MS4 permit is the primary program associated with the observed decrease in TSS.

The Boise MS4 program includes robust erosion and sediment control (2 cu/yd threshold triggers permit); rigorous new and redevelopment retain on site design requirements (retain 24 hour storm event (1") on site), street and road BMPs (street sweeping, liter control, storm drain cleaning...), complaint hotline, industrial inspections, and public education (stormdrain marking, K-12 outreach, PSAs, Eddy Trout...).

ID17050114SW015_03	Willow Creek - 3rd order	18.36	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

The Lower Boise River TMDL identifies the cause of impairment as sediment. HS

Temperature, water — **Applicable WQS attained; according to new assessment method**

USGS collected data in 2005 document SSC from 12 to 24 mg/L, and temperautre from 13.4 to 20.2 *C (pg. 150). City of Boise collected temperature data in 2004 and data in July record temperatures a one-time high of 25.8 *C and on one day (7/19) an average of 23.8 *C. (pg. 265-275), all other days within criteria for MOD (Seasonal COLD). ISDA collected data in 2001 document TSS from 4 to 196 mg/L with an annual average of 34.9 mg/L. This is above the threshold of 20 mg/L identified as supporting COLD uses in the lower Boise TMDL technical appendices (1999). Temperature is documented from 3.2 to 20.4 *C. The data indicate impairment by sediment using the rationale for COLD use support established in the lower Boise TMDL technical appendices and other approved TMDLs.
(Susan Beattie)

ID17050114SW017_06	Sand Hollow Creek - Sharp Road to Snake River	2.67	MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

This was listed as 'cause unknown' based on a suspected nutrient impairment. The lower Boise TMDL review found that although phosphorus levels may exceed targets set in the Snake River Hells Canyon TMDL, this stream reach itself is not impaired. I.e. it contributes to a phosphorus impairment elsewhere. HS

17050115 Middle Snake-payette

ID17050115SW001_08	Snake River - Boise River to Weiser River	73.58	MILES

Phosphorus (Total) — **TMDL approved or established by EPA (4A)**

17050121 Middle Fork Payette

ID17050121SW005_02	Upper MF Payette River - 1st and 2nd order	122.02	MILES

Temperature, water — **Applicable WQS attained; according to new assessment method**

The Middle Fork Payette River "source to mouth" was listed as being impaired for temperature and DEQ conducted a potential-natural-vegetation TMDL.

This assessment unit represents the upper part of the MF Payette River (above Bull Creek), and many small tributaries. As part of the TMDL effort, a temperature logger was placed just below the lower end of this assessment unit, and "salmonid spawning and the coldwater aquatic life criteria were both met." (TMDL page xiii).

The shade analysis also shows that the vast majority of this assessment unit is at or above its target shade. The small section of 10-20% below target is part of natural background variation.

Furthermore, two BURP sites in the assessment unit (Wet Foot and Trail Creek) show that it is meeting its beneficial uses. In fact, Wet Foot Creek scored a perfect 3/3/3 rating, and bull trout were found.

This part of the MF Payette River meets its beneficial uses. Hawk Stone 1/14/10

ID17050121SW007_02	Silver Creek - 1st and 2nd order	23.91	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

The headwaters of Silver Creek (including Long Fork Silver Creek) were identified as having a mild temperature impairment in the MF Payette TMDL, and were given shade targets. HS

17050122 Payette

ID17050122SW017_02	Big Willow Creek - 1st and 2nd order	164.87	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

5/6/2011 (NED) - The Big Willow Creek TMDL and Subbasin Assessment was reviewed and approved by EPA on July 1, 2008. The 2nd order segment of Big Willow Creek requires a reduction in load of 1,550 kWh/day (increase in shade between 1 and 21%) to meet the load allocation of 1,698 kWh/day. For additional information, refer to Section 5.4 and Table 23 on page 73 of the TMDL.

ID17050122SW017_04	Big Willow Creek - 4th order (Dry Creek to Payette Ditch)	13.29	MILES

Sedimentation/Siltation — **Applicable WQS attained; reason for recovery unspecified**

From the Big Willow 5 year review, page 164:
'ISDA collected data in 2007 which range from 2.4 to 10.6 mg/L'

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050122SW017_06	Big Willow Creek - 6th order (Payette Ditch, Birding Island)	15.69	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; reason for recovery unspecified**

Source of Impairment has been identified as temperature. HS

Temperature, water — **TMDL approved or established by EPA (4A)**

17050124 Weiser

ID17050124SW001_05	Weiser River - Keithly Cr. to Crane Cr.	20.72	MILES

Phosphorus (Total) — **Applicable WQS attained; original basis for listing was incorrect**

6/2/2010 (NED) - During the development of the Weiser River Subbasin Assessment and TMDL, approved 01/19/2007, diel monitoring was conducted which did not indicate an exceedance of the dissolved oxygen criteria nor was nuisance aquatic growth detected by dissolved oxygen. Therefore, it has been determined that nutrients are not impairing the designated uses in the lower Weiser River. Refer to page 92 of the TMDL for additional information.

ID17050124SW001_06	Weiser River - Crane Creek to Galloway Dam	4.66	MILES

Escherichia coli — **Applicable WQS attained; reason for recovery unspecified**

From the Weiser River TMDL, page xxvii:

Bacteria monitoring conducted in 2001 and 2002 showed Idaho water quality geometric mean criteria were not exceeded, indicating primary contact recreation is fully supported.

HS 1/6/2010

Phosphorus (Total) — **Applicable WQS attained; original basis for listing was incorrect**

6/2/2010 (NED) - During the development of the Weiser River Subbasin Assessment and TMDL, approved 01/19/2007, diel monitoring was conducted which did not indicate an exceedance of the dissolved oxygen criteria nor was nuisance aquatic growth detected by dissolved oxygen. Therefore, it has been determined that nutrients are not impairing the designated uses in the lower Weiser River. Refer to page 92 of the TMDL for additional information.

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050124SW001_06a	Weiser River - Galloway Dam to Snake River	16.98	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

Phosphorus (Total) — **Applicable WQS attained; original basis for listing was incorrect**

6/2/2010 (NED) - During the development of the Weiser River Subbasin Assessment and TMDL, approved 01/19/2007, diel monitoring was conducted which did not indicate an exceedance of the dissolved oxygen criteria nor was nuisance aquatic growth detected by dissolved oxygen. Therefore, it has been determined that nutrients are not impairing the designated uses in the lower Weiser River. Refer to page 92 of the TMDL for additional information.

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050124SW003_05	Crane Creek - Crane Creek Reservoir Dam to mouth	17.17	MILES

Phosphorus (Total) — **Applicable WQS attained; reason for recovery unspecified**

The Weiser River TMDL, page xxx, says:

To meet the target/allocation established for the lower Weiser River, a total phosphorus reduction from the Crane Creek needs to occur. Water quality data for Crane Creek showed that the May through September total phosphorus load would need to be reduced by 64-73% to reach the total phosphorus target for the lower Weiser River.

I.e. Crane Creek itself is not impaired by phosphorus, but an allocation has been given to it to aid a downstream waterbody.

1/8/10 HS

ID17050124SW004L_0L	Crane Creek Reservoir	2315.37	ACRES

Sedimentation/Siltation — **Applicable WQS attained; according to new assessment method**

Crane Creek Reservoir was extensively monitored during the summer of 2007. The following is excerpted from the final report, attached to this assessment unit:

Idaho's water quality criterion for turbidity is outlined in IDAPA 58.01.02.250(02):

Turbidity, below any applicable mixing zone set by the Department, shall not exceed background turbidity by more than fifty (50) NTU instantaneously or more than twenty-five (25) NTU for more than ten (10) consecutive days.

During the summer, there are no inflows to Crane Creek Reservoir. With no exterior sources of sediment, turbidity in the reservoir is caused solely by wave action on the shore and by fish stirring up sediments, both of which may be considered natural background processes. Despite the high turbidity, the levels of suspended sediment are not particularly elevated, probably because of the very fine nature of the clay particles.

It is therefore concluded that the reservoir does not exceed Idaho standards for turbidity, nor for suspended sediment.

Hawk Stone

ID17050124SW007_05	Weiser River - Hornet Creek to Little Weiser River	24.37	MILES

Phosphorus (Total) — **Applicable WQS attained; reason for recovery unspecified**

From the Weiser River TMDL, page xxviii:

Assessment Guidance (Grafe et al. 2002). The overall “Condition Rating” for the upper Weiser River segment indicates the segment is fully supporting cold water aquatic life. Neither a nutrient nor a sediment total maximum daily load nor allocations are required. Total phosphorus concentrations are well below the target concentration in the middlelower Weiser River segments and the target for the Snake River. The upper Weiser River segment is the only segment with permitted point source discharges. Waste load allocations for these permitted facilities will be established based on their current permitted discharge levels. Additional bacteria monitoring showed no exceedence of the geometric mean criteria and primary contact recreation is fully supported.

HS 1/8/10

Sedimentation/Siltation — **Applicable WQS attained; reason for recovery unspecified**

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050124SW007_05a	Weiser River - Little Weiser River to Keithly Creek	7.37	MILES

Sedimentation/Siltation — **TMDL approved or established by EPA (4A)**

Temperature, water — **TMDL approved or established by EPA (4A)**

ID17050124SW008_04	Little Weiser River - Grays Creek to mouth	20.42	MILES

Phosphorus (Total) **Applicable WQS attained; original basis for listing was incorrect**

6/2/2010 (NED) - During the development of the Weiser River Subbasin Assessment and TMDL, approved 01/19/2007, diel monitoring was conducted which did not indicate an exceedance of the dissolved oxygen criteria nor was nuisance aquatic growth detected by dissolved oxygen. Therefore, it has been determined that nutrients are not impairing the designated uses in the lower Weiser River. Refer to page 92 of the TMDL for additional information.

Upper Snake

17040104 Palisades

ID17040104SK024_03	Indian Creek - Idaho/Wyoming border to Palisades Reservoir	3.21	MILES

Combined Biota/Habitat Bioassessments **Applicable WQS attained; original basis for listing was incorrect**

3/15/2010 - Based on the Palisades Subbasin and TMDL approved 02/20/2001, it was determined that all observed conditions appear to be natural characteristics of the drainage. Refer to page 57 of the TMDL for justification. NED and MLB

ID17040104SK028_04	Rainey Creek - source to mouth	12.46	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform delisted and replaced by e-coli due to change in WQS. 3-29-10 SR

17040105 Salt

ID17040105SK006_02	Stump Creek - source to Idaho/Wyoming border	56.11	MILES

Combined Biota/Habitat Bioassessments **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

MT: No BURP associated with this AU, insufficient data to support a listing.

17040201 Idaho Falls

ID17040201SK001_05	Snake River - Dry Bed Creek to river mile 791 (T01N, R37E, S	5.72	MILES

Sedimentation/Siltation **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

1/07/2010 (NED)- According to the Idaho Falls Subbasin Assessment and TMDL, dated August 25, 2004, The South Fork Willow Creek has been 303(d) listed for sediment; however, this stream no longer exists as a natural watercourse. Since the construction of Ririe Dam in the 1970's the flow in the Willow Creek/Sand Creek complex has been controlled for irrigation. Willow Creek, including both the North Fork and the South Fork have been converted to canal conveyance structures with straightened channels and riprap style bank reinforcement. No water flows in these channels during the non-irrigation season. Therefore, DEQ recommended that South Fork Willow Creek be "delisted" from the 303(d) list and moved to Category 3 for being a canal.

ID17040201SK002_05	South Fork Willow Creek - source to mouth	6.87	MILES

Sedimentation/Siltation **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

1/07/2010 (NED)- The Idaho Falls Subbasin Assessment and TMDL, dated August 25, 2004 states the following on page 13: "The South Fork Willow Creek has been 303(d) listed for sediment; however, this stream no longer exists as a natural watercourse. Since the construction of Ririe Dam in the 1970's the flow in the Willow Creek/Sand Creek complex has been controlled for irrigation. Willow Creek, including both the North Fork and the South Fork have been converted to canal conveyance structures with straightened channels and riprap style bank reinforcement. No
water flows in these channels during the non-irrigation season. Therefore, it is recommended that the South Fork Willow Creek be "delisted" from the 303(d) list" and moved to Category 3 for being a canal.

ID17040201SK003_05	North Fork Willow Creek - source to mouth	10.21	MILES

Sedimentation/Siltation — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

1/07/2010 (NED)- The Idaho Falls Subbasin Assessment and TMDL, dated August 25, 2004 states the following on page 13: "The South Fork Willow Creek has been 303(d) listed for sediment; however, this stream no longer exists as a natural watercourse. Since the construction of Ririe Dam in the 1970's the flow in the Willow Creek/Sand Creek complex has been controlled for irrigation. Willow Creek, including both the North Fork and the South Fork have been converted to canal conveyance structures with straightened channels and riprap style bank reinforcement. No
water flows in these channels during the non-irrigation season. Therefore, it is recommended that South Fork Willow Creek be "delisted" from the 303(d) list" and moved to Category 3 for being a canal.

ID17040201SK008_02	Birch Creek - source to mouth	29.33	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

01/13/2010 - The TMDL determined that sediment from bank erosion is the cause of the impairment. Sediment allocations for Birch Creek are discussed on page 43 of the Idaho Falls Subbasin Assessment and TMDL, dated 8/25/2004 and approved 11/22/2004. NED

ID17040201SK008_03	Birch Creek - source to mouth	6.21	MILES

Combined Biota/Habitat Bioassessments — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

12/28/2009 - The TMDL determined that sediment from bank erosion is the cause of the impairment. Sediment allocations for Birch Creek are discussed on page 43 of the Idaho Falls Subbasin Assessment and TMDL, dated 8/25/2004 and approved 11/22/2004. NED

17040202 Upper Henrys

ID17040202SK002_05	Warm River - Warm River Spring to mouth	0.57	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Warm River was listed in Category 5 for not supporting CWAL due to temperature. In order to bring Warm River back to its target load level of 3,260,351 kWh/day, the existing load of 3,665,140 kWh/day will need to be reduced by 404,790 kWh/day to successfully restore this water to achieving WQS. For additional information refer Section 5.2.5 that begins on page 49 of the TMDL.

ID17040202SK005_02	Warm River - source to Warm River Spring	70.29	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Warm River was listed in Category 5 for not supporting CWAL due to temperature. In order to bring Warm River back to its target load level of 3,260,351 kWh/day, the existing load of 3,665,140 kWh/day will need to be reduced by 404,790 kWh/day to successfully restore this water to achieving WQS. For additional information refer Section 5.2.5 that begins on page 49 of the TMDL.

ID17040202SK018_03	Buffalo River - source to Elk Creek	9.11	MILES

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

Previous listing was based on Chick Creek assessment. There is no data on the Buffalo River. Chick Creek was split from this AU so all uses for this current AU are not assessed. 3-16-10 SR

ID17040202SK033_02	Howard Creek - source to mouth	15.24	MILES

Temperature, water — **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Howard Creek was listed in Category 5 for not supporting CWAL and SS due to temperature. In order to bring Howard Creek back to its target load level of 141,084 kWh/day, the existing load of 175,034 kWh/day will need to be reduced by 33,950 kWh/day to successfully restore this water to achieving WQS. For additional information refer Section 5.2.5 that begins on page 49 of the TMDL.

ID17040202SK034_02	Targhee Creek - source to mouth	28.84	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Warm River was listed in Category 5 for not supporting CWAL due to temperature. In order to bring Targhee Creek back to its target load level of 303,594 kWh/day, the existing load of 321,794 kWh/day will need to be reduced by 18,200 kWh/day to successfully restore this water to achieving WQS. For additional information refer Section 5.2.5 that begins on page 49 of the TMDL.

ID17040202SK035_02	Timber Creek - source to mouth	16.97	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Timber Creek was listed in Category 5 for not supporting CWAL due to temperature. In order to bring Timber Creek back to its target load level of 15,967 kWh/day, the existing load of 26,873 kWh/day will need to be reduced by 10,906 kWh/day to successfully restore this water to achieving WQS. For additional information refer Section 5.2.5 that begins on page 49 of the TMDL.

ID17040202SK035_03	Timber Creek - source to mouth	3.37	MILES

Temperature, water **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Timber Creek was listed in Category 5 for not supporting CWAL due to temperature. In order to bring Timber Creek back to its target load level of 15,967 kWh/day, the existing load of 26,873 kWh/day will need to be reduced by 10,906 kWh/day to successfully restore this water to achieving WQS. For additional information refer Section 5.2.5 that begins on page 49 of the TMDL.

ID17040202SK036_03	Duck Creek - source to mouth	4.79	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Duck Creek was listed in Category 5 for not supporting CWAL due to excess sediment. The load allocations for Duck Creek were developed from stream bank erosion inventories conducted by DEQ. Duck Creek requires a 71% reduction in current loading to meet its load capacity of 15 t/mi/yr. For sediment load allocations, refer to Table 6 on page 26 in the TMDL.

Temperature, water **TMDL approved or established by EPA (4A)**

12/15/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Duck Creek was listed in Category 5 for not supporting CWAL due to temperature. In order to bring Duck Creek back to its target load level of 90,205 kWh/day, the existing load of 103,938 kWh/day will need to be reduced by 13,733 kWh/day to successfully restore this water to achieving WQS. For additional information refer Section 5.2.5 that begins on page 49 of the TMDL.

ID17040202SK045_03	Sheridan Creek - Kilgore Road (T13N, R41E, Sec. 07) to mout	18.64	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

12/20/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Sheridan Creek was listed in Category 5 for not supporting CWAL due to excess sediment. The load allocations for Sheridan Creek were developed from stream bank erosion inventories conducted by DEQ. Sheridan Creek requires a 79% reduction in current loading to meet its load capacity of 5 t/mi/yr. For sediment load allocations, refer to Table 6 on page 26 in the TMDL.

17040203 Lower Henrys

ID17040203SK007_02	Conant Creek - Idaho/Wyoming border to mouth	45.26	MILES

Escherichia coli **TMDL approved or established by EPA (4A)**

12/10/2010 (NED) - The Upper and Lower Henry's Fork TMDL was reviewed and approved by EPA on August 17, 2010. Conant Creek (aka Squirrel Creek) was listed in Category 5 for not supporting SCR due to Fecal coliform (replaced by E.coli due to a change in WQS). E.coli data collected in Conant Crek, showed a geometric mean of 131 col/100 mL, which exceeds the average monthly limit of the the geometric mean of 126 col/100 mL. The target established in the TMDL is the E.coli water quality standard of 126 col/mL. For additional information, refer to Section 5.3 which begins on page 51 of the TMDL.

Fecal Coliform **Applicable WQS attained; due to change in WQS**

12/10/2010 (NED) - Fecal coliform has been replaced by E.coli as the listed impairment due to a change in DEQ's water quality standards from a criterion associated with fecal coliform to a more specific criterion for E. coli. Data collected from Conant Creek (aka Squirrel Creek) contained E.coli bacteria in concentrations exceeding the geometric mean of 126 col/100 mL. Therefore, an E.coli TMDL has been established for Conant Creek.

17040204 Teton

ID17040204SK005_04	Moody Creek - confluence of North and South Fork Moody Cre	19.57	MILES

Cause Unknown — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

03/29/2010 - During the development of the Teton River Subbasin Assessment and TMDL it was determined that the cause of the impairment was Total Phosphorus. Therefore, Cause Unknown was delisted and TP was added and moved to Category 4a for having an approved TMDL (Supplement to the Teton River TMDL-Moody, Fox, and Spring Creeks approved 9/26/2003). NED

ID17040204SK014_04	Teton River - Felt Dam outlet to Milk Creek	1.66	MILES

Cause Unknown — **Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3)**

03/29/2010 (NED) - During the development of the Teton River Subbasin Assessment and TMDL, dated February 24, 2003, it was determined that the cause of the biological impairment (cause unknown) was due to nitrogen (nitrate) and total phosphorus. Therefore, cause unknown has been delisted and replaced with nitrogen (nitrate) and total phosphorus which have been moved to Category 4a. For loading capacity and targets, refer to page 204 and Table 39 on page 205 of the TMDL.

Nitrogen, Nitrate — **TMDL approved or established by EPA (4A)**

5/2/2011 (NED) - The Teton River Subbasin Assessment and TMDL was reviewed and approved by EPA on February 24, 2003. In order to bring this reach of the upper Teton River back to its target load capacity of 305,645 lbs/yr, the existing load of 494,270 lbs/yr will need to be reduced by 38%, or 187,823 lbs/yr, to successfully meet the nitrogen (nitrate) target of 0.3 mg/L. For additional information, refer to page 204 and Table 39 on page 205 of the TMDL.

ID17040204SK015_04	Teton River - Felt Dam pool	4.12	MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

4/29/2011 (NED) - During the development of the Teton River Subbasin Assessment and TMDL, dated February 24, 2003, it was determined that the cause of the biological impairment (cause unknown) was due to nitrogen (nitrate) and total phosphorus. Therefore, cause unknown has been delisted and replaced with nitrogen (nitrate) and total phosphorus which have been moved to Category 4a. For loading capacity and targets, refer to page 204 and Table 39 on page 205 of the TMDL.

Nitrogen, Nitrate — **TMDL approved or established by EPA (4A)**

4/29/2011 (NED) - The Teton River Subbasin Assessment and TMDL was reviewed and approved by EPA on February 24, 2003. In order to bring this reach of the upper Teton River back to its target load capacity of 305,645 lbs/yr, the existing load of 494,270 lbs/yr will need to be reduced by 38%, or 187,823 lbs/yr, to successfully meet the nitrogen (nitrate) target of 0.3 mg/L. For additional information, refer to page 204 and Table 39 on page 205 of the TMDL.

Phosphorus (Total) — **TMDL approved or established by EPA (4A)**

4/29/2011 (NED) - The Teton River Subbasin Assessment and TMDL was reviewed and approved by EPA on February 24, 2003. In order to bring this reach of the upper Teton River back to its target load capacity of 101,882 lbs/yr, the existing load of 461,319 lbs/yr will need to be reduced by 78%, or 359,829 lbs/yr, to successfully meet the total phosphorus target of 0.1 mg/L. For additional information, refer to page 204 and Table 39 on page 205 of the TMDL.

ID17040204SK016_04	Teton River - Highway 33 bridge to Felt Dam pool	3.26	MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

4/29/2011 (NED) - During the development of the Teton River Subbasin Assessment and TMDL, dated February 24, 2003, it was determined that the cause of the biological impairment (cause unknown) was due to nitrogen (nitrate) and total phosphorus. Therefore, cause unknown has been delisted and replaced with nitrogen (nitrate) and total phosphorus which have been moved to Category 4a. For loading capacity and targets, refer to page 204 and Table 39 on page 205 of the TMDL.

Nitrogen, Nitrate — **TMDL approved or established by EPA (4A)**

4/29/2011 (NED) - The Teton River Subbasin Assessment and TMDL was reviewed and approved by EPA on February 24, 2003. In order to bring this reach of the upper Teton River back to its target load capacity of 305,645 lbs/yr, the existing load of 494,270 lbs/yr will need to be reduced by 38%, or 187,823 lbs/yr, to successfully meet the nitrogen (nitrate) target of 0.3 mg/L. For additional information, refer to page 204 and Table 39 on page 205 of the TMDL.

Phosphorus (Total) — **TMDL approved or established by EPA (4A)**

4/29/2011 (NED) - The Teton River Subbasin Assessment and TMDL was reviewed and approved by EPA on February 24, 2003. In order to bring this reach of the upper Teton River back to its target load capacity of 101,882 lbs/yr, the existing load of 461,319 lbs/yr will need to be reduced by 78%, or 359,829 lbs/yr, to successfully meet the total phosphorus target of 0.1 mg/L. For additional information, refer to page 204 and Table 39 on page 205 of the TMDL.

ID17040204SK021_03	Horseshoe Creek - pipeline diversion (SE ¼, NW ¼, Sec. 27,	4.81	MILES

Combined Biota/Habitat Bioassessments **Applicable WQS attained; original basis for listing was incorrect**

8/30/2010 - During the development of the Teton River Subbasin Assessment and TMDL, it was determined that the cause of the biological impairment (Combined Biota/Habitat Bioassessments) was due to low flow alterations. Therefore, combined biota/habitat bioassessments has been delisted due to a listing error and replaced with low flow alterations. Refer to page 123 of the TMDL for additional information.

17040205 Willow

ID17040205SK001_05	Willow Creek - Ririe Reservoir Dam to Eagle Rock Canal	5.47	MILES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

3/18/2010 - During the development of the Willow Creek Subbasin and TMDL approved 06/30/2004, it was determined that Ririe Reservoir/ Willow Creek is not impaired by sediment. Refer to page 107 of the TMDL for justification. NED and MLB

ID17040205SK002_05L	Ririe Reservoir (Willow Creek)	1416.52	ACRES

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

3/18/2010 (NED and MLB)- During the development of the Willow Creek Subbasin and TMDL approved 06/30/2004, it was determined that Ririe Reservoir/ Willow Creek is not impaired by sediment. Refer to page 107 of the TMDL for justification.

ID17040205SK005_02	Willow Creek - Birch Creek to Bulls Fork	57.41	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

WQS changed to e-coli. Geo mean for e-coli in this AU is 1198. Cause changed from Fecal Coliform to E-Coli. The use is still NFS. 3-15-10 SR

ID17040205SK008_02	Willow Creek - Mud Creek to Birch Creek	27.76	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform delisted as cause and e-coli added due to change in Standards. Geo mean for e-coli is 375 so use is still NFS. 3-15-10 SR

ID17040205SK011_04	Willow Creek - Crane Creek to Mud Creek	8.4	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

3/30/2011 (NED) - The Wilow Creek Subbasin Assessment and TMDL was reviewed and approved by EPA on June 30, 2004. Willow Creek was listed in Category 5 for not supporting CWAL and SS due to excess sediment. The load allocations for Willow Creek were developed from stream bank erosion inventories and WEPP road erosion modeling. Willow Creek requires a 93% reduction in current loading (213 t/mi/yr) to meet its load capacity of 14 t/mi/yr. For sediment load allocations, refer to Table 43 on page 100 in the TMDL.

ID17040205SK014_02	Crane Creek - source to mouth	44.98	MILES

Temperature, water **Applicable WQS attained; original basis for listing was incorrect**

6/27/2011 (NED) - Temperature was listed in error on Idaho's 2008 Integrated Report. DEQ has no readily available continuous temperature data that suggests thermal loading is occurring.

ID17040205SK024_02	Brockman Creek - Corral Creek to mouth	20.04	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform delisted and E-Coli added due to change in WQS. Geo mean for e-coli is 1041 so use is still NFS. 3-15-10 SR

17040207 Blackfoot

ID17040207SK006_04	Corral Creek - lower	6.59	MILES

Cause Unknown — **Applicable WQS attained; original basis for listing was incorrect**

During the development of the Blackfoot River Subbasin Assessment and TMDL, approved 4/3/2002, it was determined that the cause of the impairment (Cause Unknown) was excess sediment. Therefore, Cause Unknown has been delisted and replaced with Sediment which has been moved to Category 4a. For sediment load allocations, refer to page 7 and Table 1-1 on page 4 of the TMDL.

According to the TMDL, little data were available to estimate a traditional mass per unit time sediment load allocation, therefore, a surrogate load allocation of 80% streambank stability was used for active eroding streambank.

Combined Biota/Habitat Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

During the development of the Blackfoot River Subbasin Assessment and TMDL, approved 4/3/2002, it was determined that the cause of the biological impairment was excess sediment. Therefore, combined biota/habitat bioassessment has been delisted and replaced with Sediment which has been moved to Category 4a. For sediment load allocations, refer to page 7 and Table 1-1 on page 4 of the TMDL.

According to the TMDL, little data were available to estimate a traditional mass per unit time sediment load allocation, therefore, a surrogate load allocation of 80% streambank stability was used for active eroding streambank.

Fishes Bioassessments — **Applicable WQS attained; original basis for listing was incorrect**

During the development of the Blackfoot River Subbasin Assessment and TMDL, approved 4/3/2002, it was determined that the reason why the SFI failed on Corral Creek (Fish Bioassessments) was because of excess sediment. Therefore, Fish Bioassessments which was added to indicate there was an impairment that was causing a low SFI, has been delisted and replaced with Sediment which has been moved to Category 4a. For sediment load allocations, refer to page 7 and Table 1-1 on page 4 of the TMDL.

Habitat Assessment (Streams) — **Applicable WQS attained; original basis for listing was incorrect**

During the development of the Blackfoot River Subbasin Assessment and TMDL, approved 4/3/2002, it was determined that the reason why the SHI score was low in 2003, which lead to listing habitat assessement, was because of excess sediment. However, in 2008 the SHI score was 3. Therefore, habitat assessment which was added to indicate there was an impairment that was causing a low SHI, has been delisted and replaced with Sediment which has been moved to Category 4a. For sediment load allocations, refer to page 7 and Table 1-1 on page 4 of the TMDL.

Total Suspended Solids (TSS) — **Applicable WQS attained; original basis for listing was incorrect**

The Blackfoot River Subbasin Assessment and TMDL, approved 4/3/2002, address the TSS impairment on Lower Corral Creek by setting load allocations for sediment. Therefore, TSS has been delisted and replaced with Sediment which has been moved to Category 4a. For sediment load allocations, refer to page 7 and Table 1-1 on page 4 of the TMDL. According to the TMDL, little data were available to estimate a traditional mass per unit time sediment load allocation, therefore, a surrogate load allocation of 80% streambank stability was used for active eroding streambank.

To correct that fact that essentially the same cause is listed twice (TSS and Sedimentation) a decision was made between EPA and DEQ to delist TSS due to a listing error since there is a sediment TMDL.

17040208 Portneuf

ID17040208SK004_04	Lower Mink Creek	3.8	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/23/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and Section 5.2b on page 132 and Table 5.18 on page 133 of the TMDL.

ID17040208SK005_02	Indian Creek - source to mouth	8.13	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/22/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and Section 5.2b on page 132 and Table 5.18 on page 133 of the TMDL.

ID17040208SK006_03a	Marsh Creek - Rt Fk to Red Rock Pass	3.79	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/23/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. E.coli concentrations for Marsh Creek were estimated using bimonthly sampling data provided by IASCD from July 2007 through July 2008. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and Section 5.2b on page 132 and Table 5.18 on page 133 of the TMDL.

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ID17040208SK006_04a	lower middle Marsh Creek	19.77	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/22/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. E.coli concentrations for Marsh Creek were estimated using bimonthly sampling data provided by IASCD from December 2006 through July 2008. The established target in the TMDL is the geometric mean criterion of 126 col/mL. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and Section 5.2b on page 132 and Table 5.18 on page 133 of the TMDL.

Fecal Coliform — **Applicable WQS attained; due to change in WQS**

12/22/2010 (NED) - Fecal coliform has been replaced by E.coli as the listed impairment due to a change in DEQ's water quality standards from a criterion associated with fecal coliform to a more specific criterion for E. coli.

ID17040208SK010_02b	lower Garden Creek	7.65	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/22/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and Section 5.2b on page 132 and Table 5.18 on page 133 of the TMDL.

ID17040208SK012L_0L	Hawkins Reservoir	66.72	ACRES

Oxygen, Dissolved — **TMDL approved or established by EPA (4A)**

12/23/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established target in the TMDL for dissolved oxygen is 6.0 mg/L. As a surrogate for dissolved oxygen, a chlorophyll a target of 0.015 mg/L has been established. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and page 149 of the TMDL.

Phosphorus (Total) — **TMDL approved or established by EPA (4A)**

12/23/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established target in the TMDL for total phosphorus is 0.03 mg/L. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and page 147 of the TMDL.

ID17040208SK014_02	Cherry Creek - ephemeral tributaries	17.62	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/21/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. Refer to Section 5.1 on page 94 and Table 5.1 on page 95 for additional information.

ID17040208SK014_02a	upper Cherry Creek	10.03	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/22/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and Section 5.2b on page 132 and Table 5.18 on page 133 of the TMDL.

ID17040208SK014_02b	Cherry Creek	5.85	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/23/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. For additional information, refer to Section 5.1 on page 94 and Table 5.1 on page 95 of the TMDL.

ID17040208SK017_03	Lower Dempsey Creek	3.58	MILES

Escherichia coli — **TMDL approved or established by EPA (4A)**

12/22/2010 (NED) - The Portneuf River TMDL Revision and Addendum was reviewed and approved by EPA on July 29, 2010. The established E. coli target in the TMDL is the geometric mean criterion of 126 organisms/100 mL. For additional information, refer to Section 5.1 on page 94, Table 5.1 on page 95 and Section 5.2b on page 132 and Table 5.18 on page 133 of the TMDL.

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17040211 Goose

ID17040211SK000_05	Unclassified Waters	4.34	MILES

Other flow regime alterations **Applicable WQS attained; original basis for listing was incorrect**

12/22/2009 (NED)- The Goose Creek Subbasin Assessment and TMDL dated 12/22/2003, has the following discussion on page 34:

In most areas of the subbasin hydrologic modifications to the tributaries and mainstem streams have been extensive. Goose Creek Reservoir was built in 1911 and has dewatered Goose Creek from the dam to the confluence of the Snake River. In the 1970s a city of Burley judge ruled that the Goose Creek channel through the city of Burley no longer existed. This allowed for development of commercial and residential buildings in the floodplain and stream channel. In 1985, a District Judge for Cassia County declared that the Goose Creek channel below the reservoir no longer existed. Prior even to that ruling the streambed had been plowed in and used for home sites and row crop agriculture. Many streams are diverted from their original streambeds to new locations. For example, Birch Creek is diverted from its original stream course into the Goose Creek Reservoir, and Summit Creek has been diverted from one valley into another since as far back as the 1800s. Other historical modifications include channelization, such as in the lower portions of Mill Creek. Furthermore, most of the water bodies have control structures or pumps fully capable of removing all the water from the stream. However, most of these structures and pumps are the result of water rights that predate the CWA and will be considered as part of the subbasin characteristics in any water quality plan (see IDAPA 58.01.02.050.01).

Since Old Goose Creek Channel has been determined to no longer exist, this AU will be removed from ADB and will not be captured in the 2012 Integrated Report.

ID17040211SK003_04	Trapper Creek - from and including Squaw Cr. to reservoir.	7.3	MILES

Sedimentation/Siltation **TMDL approved or established by EPA (4A)**

1/25/2010 - Goose Creek Subbasin and TMDL approved 2004. See Table 32 pg. 192 and Table 35 pg 200 for allocations of sediment/siltation and bank stability on Trapper Creek. S. Woodhead

Temperature, water **Applicable WQS attained; original basis for listing was incorrect**

3/19/2010 - During the development of the Goose Creek Subbasin Assessment and TMDL which was approved July 25, 2004, it was determined that temperature is not impairing Trapper Creek. Refer to page 98 of the TMDL for additional information. NED

17040212 Upper Snake-Rock

ID17040212SK013_05	Rock Creek -river mile 25 (T11S, R18E, Sec. 36) to mouth	20.11	MILES

Mercury **Applicable WQS attained; original basis for listing was incorrect**

2/18/2010 - The 2007 mercury data collected by USGS was calculated in error. When the data was recalculated, the results were below the human health criterion for mercury. NED

17040214 Beaver-Camas

ID17040214SK001_06	Camas Creek - Beaver Creek to Mud Lake	18.36	MILES

Cause Unknown **Applicable WQS attained; original basis for listing was incorrect**

3/18/2010 - During the development of the Beaver-Camas Subbasin and TMDL approved 08/04/2005, it was determined that Camas Creek is not impaired by Nutrients (Cause Unknown). Refer to page 129 of the TMDL for justification. NED and MLB

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

3/18/2010 - During the development of the Beaver-Camas Subbasin and TMDL approved 08/04/2005, it was determined that Camas Creek is not impaired by Sediment. Refer to page 129 of the TMDL for justification. NED and MLB

ID17040214SK003_05	Beaver Creek - canal (T09N, R36E) to mouth	10.56	MILES

Cause Unknown **Applicable WQS attained; original basis for listing was incorrect**

3/18/2010 - During the development of the Beaver-Camas Subbasin and TMDL approved 08/04/2005, it was determined that Beaver Creek is not impaired by Nutrients (Cause Unknown) but instead impaired by flow and habitat alterations. Refer to page 129 of the TMDL for justification. NED and MLB

Sedimentation/Siltation **Applicable WQS attained; original basis for listing was incorrect**

3/18/2010 - During the development of the Beaver-Camas Subbasin and TMDL approved 08/04/2005, it was determined that Beaver Creek is not impaired by Sediment but instead impaired by flow and habitat alterations. Refer to page 129 of the TMDL for justification. NED and MLB

Temperature, water **Applicable WQS attained; original basis for listing was incorrect**

3/18/2010 - During the development of the Beaver-Camas Subbasin and TMDL approved 08/04/2005, it was determined that Beaver Creek is not impaired by Temperature but instead impaired by flow and habitat alterations. Refer to page 129 of the TMDL for justification. NED and MLB

ID17040214SK008_03	Crooked/Crab Creek - source to mouth	11.01	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform replaced by e-coli in WQS. Use evaluated using e-coli. 3-25-10 SR

ID17040214SK020_02	Beaver Creek - Idaho Creek to Miners Creek	12.83	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform replaced by e-coli in WQS. e-coli data used to evaluate uses. 3-25-10 SR

ID17040214SK021_02	Beaver Creek - source to Idaho Creek	68.4	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform replaced by e-coli in WQS. Uses evaluated using e-coli. 3-25-10 SR

17040215 Medicine Lodge

ID17040215SK005_02	West Fork Indian Creek - source to mouth	24.45	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform replaced by e-coli in WQS. 3-25-10 SR

ID17040215SK012_02	Irving Creek - source to mouth	13.69	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform replaced by e-coli in WQS. 3-25-10 SR

ID17040215SK014_02	Divide Creek - source to mouth	13.86	MILES

Fecal Coliform **Applicable WQS attained; due to change in WQS**

Fecal Coliform changed to e-coli in WQS. 3-25-10 SR

17040221 Little Wood

ID17040221SK023_03	Silver Creek - source to mouth	25.26	MILES

Mercury **Applicable WQS attained; original basis for listing was incorrect**

2/18/2010 - The 2007 mercury data analyzed by the USGS Laboratory was calculated in error. When the data was recalculated, the results were below the human health criterion for mercury. NED

Appendix L. List of Assessment Units That Have Been Evaluated to Have Zero Flow

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Assessment Unit	Stream Name	Water Body Name
ID16010102BR003_02		Thomas Fork - Idaho/Wyoming border to mouth
ID16010201BR011_02		Mill Creek - source to mouth
ID16010201BR011_02	Dry Fork	Mill Creek - source to mouth
ID16010201BR011_02	Mill Creek	Mill Creek - source to mouth
ID16010201BR013_02		Paris Creek - source to mouth
ID16010201BR013_02	Paris Creek	Paris Creek - source to mouth
ID16020309BR001_02		Deep Creek - Rock Creek to Idaho/Utah border
ID16020309BR002_02		Deep Creek - source to Rock Creek
ID16020309BR002_02	Deep Creek	Deep Creek - source to Rock Creek
ID17010104PN022_02		Deep Creek - McArthur Lake to Trail Creek
ID17010104PN027_02		Brown Creek - source to mouth
ID17010104PN027_02	Brown Creek	Brown Creek - source to mouth
ID17010104PN029_02		Kootenai River - Moyie River to Deep Creek
ID17010104PN029_02	Fry Creek	Kootenai River - Moyie River to Deep Creek
ID17010214PN001_02		Pend Oreille River - Priest River to Albeni Falls Dam
ID17010214PN001_02	Strong Creek	Pend Oreille River - Priest River to Albeni Falls Dam
ID17010214PN007_03	Spirit Creek	Spirit Creek - source to mouth
ID17010214PN013_02		Cocolalla Lake
ID17010214PN013_02	Bridgeview Creek	Cocolalla Lake
ID17010214PN013_02	Cocolalla Creek	Cocolalla Lake
ID17010214PN013_02	Hickman Creek	Cocolalla Lake
ID17010214PN013_02	Westmond Creek	Cocolalla Lake
ID17010214PN016_02		Fry Creek - source to mouth
ID17010214PN016_02	Fry Creek	Fry Creek - source to mouth
ID17010215PN001_02		Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Alder Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Benton Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Blue Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Cottonwood Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Crazy Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Dubius Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Fox Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Little Pine Creek	Lower Priest River - Upper West Branch Priest River to mouth

Assessment Unit	Stream Name	Water Body Name
ID17010215PN001_02	Murray Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Prater Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Ranger Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Saddler Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN001_02	Sanborn Creek	Lower Priest River - Upper West Branch Priest River to mouth
ID17010215PN020_02		Beaver Creek - source to mouth
ID17010215PN020_02	Beaver Creek	Beaver Creek - source to mouth
ID17010215PN024_02		Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Bath Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Chute Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Deerhorn Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Hazard Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Hungry Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Kalispell Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Mush Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Nuisance Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Pable Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Rapids Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010215PN024_02	Virgin Creek	Kalispell Creek - Idaho/Washington border to mouth
ID17010303PN001_02f	Delcardo Creek	Coeur d'Alene Lake
ID17010303PN001_02f	Lyle Creek	Coeur d'Alene Lake
ID17010303PN001_02f	Scott Creek	Coeur d'Alene Lake
ID17010303PN001_02f	Stinson Creek	Coeur d'Alene Lake
ID17010303PN014_02		Bull Run Lake
ID17010303PN014_02	Blackrock Gulch	Bull Run Lake
ID17010303PN014_02	Bull Run Creek	Bull Run Lake
ID17010303PN016_02		Coeur d'Alene River - South Fork Coeur d'Alene River to Latour Creek
ID17010303PN017_02		Skeel and Cataldo Creeks - source to mouth
ID17010303PN017_02	Cataldo Gulch	Skeel and Cataldo Creeks - source to mouth
ID17010303PN017_02	Skeel Gulch	Skeel and Cataldo Creeks - source to mouth
ID17010304PN068_02		Street Creek - source to mouth
ID17010304PN068_02	Street Creek	Street Creek - source to mouth
ID17010305PN003_02	Skalan Creek	Spokane River - Post Falls Dam to Idaho/Washington border

Assessment Unit	Stream Name	Water Body Name
ID17010305PN004_02		Spokane River - Coeur d'Alene Lake to Post Falls Dam
ID17010305PN005_02		Hayden Lake
ID17010305PN005_02	Colburn Creek	Hayden Lake
ID17010305PN005_02	Harrison Creek	Hayden Lake
ID17010305PN005_02	Hayden Creek	Hayden Lake
ID17010305PN005_02	Hayden Lake	Hayden Lake
ID17010305PN006_02	Yellowbanks Creek	Yellowbanks Creek - source to mouth
ID17010305PN006_02	Yellowbanks Creek	Yellowbanks Creek - source to mouth
ID17010305PN007_02	Jim Creek	Jim Creek - source to mouth
ID17010305PN013_02		Twin Lakes
ID17010305PN016_02		Hauser Lake
ID17010305PN016_02	Shaw Creek	Hauser Lake
ID17040104SK027_02		Palisades Creek - source to mouth
ID17040104SK027_02	Butler Canyon Creek	Palisades Creek - source to mouth
ID17040104SK027_02	Canary Canyon Creek	Palisades Creek - source to mouth
ID17040104SK027_02	Cromwell Canyon Creek	Palisades Creek - source to mouth
ID17040104SK027_02	Dry Creek	Palisades Creek - source to mouth
ID17040104SK027_02	East Fork Palisades Creek	Palisades Creek - source to mouth
ID17040104SK027_02	Lost Spring Creek	Palisades Creek - source to mouth
ID17040104SK027_02	North Fork Palisades Creek	Palisades Creek - source to mouth
ID17040104SK027_02	Waterfall Creek	Palisades Creek - source to mouth
ID17040201SK001_05	Crow Creek	Snake River - Dry Bed Creek to river mile 791 (T01N, R37E, Sec. 10)
ID17040201SK001_05	South Fork Willow Creek	Snake River - Dry Bed Creek to river mile 791 (T01N, R37E, Sec. 10)
ID17040202SK011_02		Robinson Creek - Idaho/Wyoming border and sources west of border to Rock Creek
ID17040202SK011_02	Bear Creek	Robinson Creek - Idaho/Wyoming border and sources west of border to Rock Creek
ID17040202SK011_02	Dry Robinson Creek	Robinson Creek - Idaho/Wyoming border and sources west of border to Rock Creek
ID17040202SK011_02	Little Robinson Creek	Robinson Creek - Idaho/Wyoming border and sources west of border to Rock Creek
ID17040202SK011_02	Robinson Creek	Robinson Creek - Idaho/Wyoming border and sources west of border to Rock Creek
ID17040203SK009_02		Falls River - Idaho/Wyoming border to Boone Creek
ID17040203SK009_02	Marysville Canal	Falls River - Idaho/Wyoming border to Boone Creek
ID17040204SK001_03		South Fork Teton River - Teton River Forks to Henrys Fork
ID17040204SK005_02		Moody Creek - confluence of North and South Fork Moody Creeks to canal

Assessment Unit	Stream Name	Water Body Name
ID17040205SK002_02		Ririe Reservoir (Willow Creek)
ID17040205SK002_02	Deer Creek	Ririe Reservoir (Willow Creek)
ID17040205SK002_02	Ririe Reservoir	Ririe Reservoir (Willow Creek)
ID17040205SK002_02	Willow Creek	Ririe Reservoir (Willow Creek)
ID17040205SK022_02		Little Valley Creek - source to mouth
ID17040205SK022_02	Little Valley Creek	Little Valley Creek - source to mouth
ID17040205SK022_02	Little Valley Reservoir	Little Valley Creek - source to mouth
ID17040206SK000_02		Unclassified waters in CU[a] 17040206
ID17040206SK000_03		Unclassified waters in CU 17040206
ID17040206SK011_02		Clifton Creek - source to mouth
ID17040206SK011_02	Clifton Creek	Clifton Creek - source to mouth
ID17040206SK025_02		Little Hole Draw - source to American Falls Reservoir
ID17040206SK026_02		Pleasant Valley - source to American Falls Reservoir
ID17040206SK026_02	Spring Hollow	Pleasant Valley - source to American Falls Reservoir
ID17040208SK001_02b		Portneuf River - Marsh Creek to American Falls Reservoir
ID17040208SK001_02b	Trail Creek	Portneuf River - Marsh Creek to American Falls Reservoir
ID17040209SK000_02		Unclassified waters in CU 17040209
ID17040209SK000_02	A-4 Canal	Unclassified waters in CU 17040209
ID17040209SK000_02	B-1 Canal	Unclassified waters in CU 17040209
ID17040209SK000_02	D-Seventeen Drain	Unclassified waters in CU 17040209
ID17040209SK000_02	F Main Drain	Unclassified waters in CU 17040209
ID17040209SK000_02	Goose Creek	Unclassified waters in CU 17040209
ID17040209SK000_02	J Main Drain	Unclassified waters in CU 17040209
ID17040209SK000_02	Main North Side Canal	Unclassified waters in CU 17040209
ID17040209SK003_02A		Marsh Creek - source to mouth
ID17040210SK001_02		Raft River - Heglar Canyon Creek to mouth
ID17040210SK001_02	Calder Creek	Raft River - Heglar Canyon Creek to mouth
ID17040210SK001_03	Calder Creek	Raft River - Heglar Canyon Creek to mouth
ID17040210SK002_03		Raft River - Cassia Creek to Heglar Canyon Creek
ID17040210SK002_03	Shirley Creek	Raft River - Cassia Creek to Heglar Canyon Creek
ID17040210SK002_03	Warm Creek	Raft River - Cassia Creek to Heglar Canyon Creek
ID17040210SK005_02		Cassia Creek - Clyde Creek to Conner Creek
ID17040210SK005_02	Quaking Asp Creek	Cassia Creek - Clyde Creek to Conner Creek

Assessment Unit	Stream Name	Water Body Name
ID17040210SK010_02		Raft River - Unnamed tributary (T15S, R26E, Sec. 24) to Cottonwood Creek
ID17040210SK010_02	George Creek	Raft River - Unnamed tributary (T15S, R26E, Sec. 24) to Cottonwood Creek
ID17040210SK010_02	Onemile Creek	Raft River - Unnamed tributary (T15S, R26E, Sec. 24) to Cottonwood Creek
ID17040210SK013_03		Raft River - Idaho/Utah border to Edwards Creek
ID17040210SK013_03	Circle Creek	Raft River - Idaho/Utah border to Edwards Creek
ID17040210SK013_03	Johnson Creek	Raft River - Idaho/Utah border to Edwards Creek
ID17040210SK013_03	North Creek	Raft River - Idaho/Utah border to Edwards Creek
ID17040210SK016_02		Clear Creek - Idaho/Utah border to mouth
ID17040210SK016_02	Holt Creek	Clear Creek - Idaho/Utah border to mouth
ID17040210SK016_02	Rice Creek	Clear Creek - Idaho/Utah border to mouth
ID17040210SK016_02	Round Mountain Creek	Clear Creek - Idaho/Utah border to mouth
ID17040210SK018_02		Meadow Creek - source to mouth
ID17040210SK018_02	Meadow Creek	Meadow Creek - source to mouth
ID17040210SK018_02	Pine Creek	Meadow Creek - source to mouth
ID17040210SK018_02	South Fork Sublett Creek	Meadow Creek - source to mouth
ID17040210SK021_02		Sublett Creek - source to Sublett Reservoir
ID17040210SK021_02	North Fork Sublett Creek	Sublett Creek - source to Sublett Reservoir
ID17040210SK021_02	South Fork Sublett Creek	Sublett Creek - source to Sublett Reservoir
ID17040210SK023_02		Heglar Canyon Creek - source to mouth
ID17040210SK023_02	Indian Fork	Heglar Canyon Creek - source to mouth
ID17040210SK023_03		Heglar Canyon Creek - source to mouth
ID17040210SK023_04		Heglar Canyon Creek - source to mouth
ID17040211SK000_02		Unclassified waters in CU 17040211
ID17040211SK000_02	Goose Creek	Unclassified waters in CU 17040211
ID17040211SK000_02	Jay Creek	Unclassified waters in CU 17040211
ID17040211SK000_02	Sawmill Creek	Unclassified waters in CU 17040211
ID17040211SK000_02	Summit Creek	Unclassified waters in CU 17040211
ID17040211SK000_03		Unclassified waters in CU 17040211
ID17040211SK000_03	Summit Creek	Unclassified waters in CU 17040211
ID17040211SK002_02		Lower Goose Creek
ID17040211SK002_02	Lone Cedar Creek	Lower Goose Creek
ID17040211SK014_03		Land/Willow/Smith Creek complex
ID17040211SK014_03	Big Rocky Creek	Land/Willow/Smith Creek complex

Assessment Unit	Stream Name	Water Body Name
ID17040211SK014_03	Land Creek	Land/Willow/Smith Creek complex
ID17040211SK014_03	Smith Creek	Land/Willow/Smith Creek complex
ID17040212SK000_03		Unclassified waters in CU 17040212
ID17040212SK000_03	Deep Creek	Unclassified waters in CU 17040212
ID17040212SK000_03	Deep Creek Reservoir	Unclassified waters in CU 17040212
ID17040212SK000_03	North Fork Deep Creek	Unclassified waters in CU 17040212
ID17040212SK004_02		Tuana Gulch - source to mouth
ID17040212SK009_02	Deep Creek	Deep Creek - source to High Line Canal
ID17040212SK041_03		Dry Creek - source to mouth
ID17040212SK041_03	Dry Creek	Dry Creek - source to mouth
ID17040213SK002_02		Devil Creek - source to mouth
ID17040213SK002_02	Camas Slough	Devil Creek - source to mouth
ID17040213SK002_02	Cedar Mesa Canal	Devil Creek - source to mouth
ID17040213SK002_02	Devil Creek	Devil Creek - source to mouth
ID17040213SK002_02	East Fork Devil Creek	Devil Creek - source to mouth
ID17040213SK002_02	Middle Fork Devil Creek	Devil Creek - source to mouth
ID17040213SK002_02	West Fork Devil Creek	Devil Creek - source to mouth
ID17040213SK002_02	Worley Ditch	Devil Creek - source to mouth
ID17040213SK003_02		Salmon Falls Creek - Salmon Falls Creek Dam to Devil Creek
ID17040214SK005_03	Dry Creek	Dry Creek - source to mouth
ID17040214SK014_02		Beaver Creek - Dry Creek to canal (T09N, R36E)
ID17040214SK019_03	Miners Creek	Miners Creek - source to mouth
ID17040215SK002_02		Medicine Lodge Creek - Indian Creek to playas
ID17040215SK022_02		Chandler Canyon complex
ID17040215SK022_03		Chandler Canyon complex
ID17040216SK001_02		Birch Creek - Reno Ditch to playas
ID17040216SK001_02	Middle Fork Kyle Canyon	Birch Creek - Reno Ditch to playas
ID17040216SK001_02	South Fork Kyle Canyon	Birch Creek - Reno Ditch to playas
ID17040216SK004_03		Unnamed tributary - source to mouth; includes Timber Canyon to Worthing Canyon Creeks (T11N, R11W, Sec. 35)
ID17040216SK007_03	Birch Creek	Mud Creek - Willow Creek to Scott Canyon Creek
ID17040216SK011_02		Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)
ID17040216SK011_02	Carlin Creek	Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)

Assessment Unit	Stream Name	Water Body Name
ID17040216SK011_02	Cottonwood Creek	Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)
ID17040216SK011_02	Middle Creek	Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)
ID17040216SK011_02	Mud Creek	Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)
ID17040216SK011_02	Shears Creek	Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)
ID17040216SK011_03		Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)
ID17040216SK011_03	Mud Creek	Mud Creek - source to unnamed tributary (T12N, R11W, Sec. 29)
ID17040216SK012_03		Unnamed tributary - source to mouth (T12N, R11W, Sec. 29)
ID17040216SK013_02		Meadow Canyon Creek - source to mouth
ID17040217SK004_03		North Creek - source to mouth
ID17040217SK010_02		Little Lost River - confluence of Summit and Sawmill Creeks to Wet Creek
ID17040217SK010_02	Cedar Run Creek	Little Lost River - confluence of Summit and Sawmill Creeks to Wet Creek
ID17040217SK020_02		Dry Creek - Dry Creek Canal to mouth
ID17040217SK020_02	Dry Creek	Dry Creek - Dry Creek Canal to mouth
ID17040217SK028_03		Hurst Creek - source to mouth
ID17040217SK028_03	Hurst Creek	Hurst Creek - source to mouth
ID17040218SK002_02		Big Lost River - Spring Creek to Big Lost River Sinks (playas)
ID17040218SK002_02	Arco Canal	Big Lost River - Spring Creek to Big Lost River Sinks (playas)
ID17040218SK002_02	Ferris Slough	Big Lost River - Spring Creek to Big Lost River Sinks (playas)
ID17040218SK002_03		Big Lost River - Spring Creek to Big Lost River Sinks (playas)
ID17040218SK002_04		Big Lost River - Spring Creek to Big Lost River Sinks (playas)
ID17040218SK006_02		Lower Pass Creek - source to mouth
ID17040218SK006_02	Lower Pass Creek	Lower Pass Creek - source to mouth
ID17040218SK007_05		Big Lost River - Alder Creek to Antelope Creek
ID17040218SK007_05	Big Lost River	Big Lost River - Alder Creek to Antelope Creek
ID17040218SK007_05	Spring Creek	Big Lost River - Alder Creek to Antelope Creek
ID17040218SK011_02		Big Lost River - McKay Reservoir Dam to Beck and Evan Ditch
ID17040218SK011_02	Burnett Ditch	Big Lost River - McKay Reservoir Dam to Beck and Evan Ditch
ID17040218SK011_02	Hanson Ditch	Big Lost River - McKay Reservoir Dam to Beck and Evan Ditch
ID17040218SK011_02	Lower Cedar Creek	Big Lost River - McKay Reservoir Dam to Beck and Evan Ditch
ID17040218SK011_02	Swauger Ditch	Big Lost River - McKay Reservoir Dam to Beck and Evan Ditch
ID17040218SK012_02		McKay Reservoir
ID17040218SK012_02	Upper Cedar Creek	McKay Reservoir
ID17040218SK017_02	Lone Cedar Creek	Lone Cedar Creek - source to mouth

Assessment Unit	Stream Name	Water Body Name
ID17040218SK021_02		Arentson Gulch and unnamed tributaries - source to mouth (T10N, R22E)
ID17040218SK021_02	Thousand Springs Creek	Arentson Gulch and unnamed tributaries - source to mouth (T10N, R22E)
ID17040218SK022_03	Sage Creek	Sage Creek - source to mouth
ID17040218SK048_02		Spring Creek - source to mouth
ID17040218SK059_05		Dry Fork Creek - source to mouth
ID17040218SK059_05	South Fork Antelope Creek	Dry Fork Creek - source to mouth
ID17040218SK061_03		Hammond Spring Creek complex
ID17040218SK061_03	Blaine Canal	Hammond Spring Creek complex
ID17040218SK061_03	Hammond Spring Creek	Hammond Spring Creek complex
ID17040219SK000_02		Unclassified waters in CU 17040219
ID17040219SK000_02	Portuguese Creek	Unclassified waters in CU 17040219
ID17040219SK000_02	Preacher Creek	Unclassified waters in CU 17040219
ID17040219SK000_02	Turkey Creek	Unclassified waters in CU 17040219
ID17040219SK000_03		Unclassified waters in CU 17040219
ID17040219SK000_03	Preacher Creek	Unclassified waters in CU 17040219
ID17040219SK002_02		Big Wood River - Magic Reservoir Dam to mouth
ID17040219SK002_02	Lateral X-4	Big Wood River - Magic Reservoir Dam to mouth
ID17040219SK003_02		Magic Reservoir
ID17040219SK003_02	Lava Creek	Magic Reservoir
ID17040219SK004_02		Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Big Wood River	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Black Slough	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Brock Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Cove Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Crystal Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	North Fork Chukar Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Reed Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Spring Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_02	Willow Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_03		Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_03	Seamans Creek	Big Wood River - Seamans Creek to Magic Reservoir
ID17040219SK004_03	Willow Creek	Big Wood River - Seamans Creek to Magic Reservoir

Assessment Unit	Stream Name	Water Body Name
ID17040219SK029_03	Thorn Creek	Thorn Creek - source to mouth
ID17040219SK030_04	Black Canyon Creek	Black Canyon Creek - source to mouth
ID17040219SK030_04	Dry Creek	Black Canyon Creek - source to mouth
ID17040220SK001_02		Camas Creek - Elk Creek to Magic Reservoir
ID17040220SK001_02	Fricke Creek	Camas Creek - Elk Creek to Magic Reservoir
ID17040220SK001_02	Minnehaha Creek	Camas Creek - Elk Creek to Magic Reservoir
ID17040220SK001_02	Northside Slough	Camas Creek - Elk Creek to Magic Reservoir
ID17040220SK001_02	Poison Creek	Camas Creek - Elk Creek to Magic Reservoir
ID17040220SK001_02	Spring Creek	Camas Creek - Elk Creek to Magic Reservoir
ID17040220SK007_02		Camas Creek - Solider Creek to Elk Creek
ID17040220SK007_02	Knowlton Creek	Camas Creek - Solider Creek to Elk Creek
ID17040220SK008_02		Deer Creek - Big Deer Creek to mouth
ID17040220SK008_02	Daugherty Creek	Deer Creek - Big Deer Creek to mouth
ID17040220SK008_03	Daugherty Creek	Deer Creek - Big Deer Creek to mouth
ID17040220SK008_03	Deer Creek	Deer Creek - Big Deer Creek to mouth
ID17040220SK009_02	Big Deer Creek	Deer Creek - source to and including Big Deer Creek
ID17040220SK009_02	Chicken Creek	Deer Creek - source to and including Big Deer Creek
ID17040220SK009_02	Deer Creek	Deer Creek - source to and including Big Deer Creek
ID17040220SK009_02	Little Deer Creek	Deer Creek - source to and including Big Deer Creek
ID17040220SK010_02	Powell Creek	Powell Creek - source to mouth
ID17040220SK013_02		Camas Creek - Corral Creek to Soldier Creek
ID17040220SK013_02	East Fork Threemile Creek	Camas Creek - Corral Creek to Soldier Creek
ID17040220SK013_02	Lansing Creek	Camas Creek - Corral Creek to Soldier Creek
ID17040220SK013_03		Camas Creek - Corral Creek to Soldier Creek
ID17040220SK013_03	East Fork Threemile Creek	Camas Creek - Corral Creek to Soldier Creek
ID17040220SK014_02	McMahan Creek	Threemile Creek - source to mouth
ID17040220SK014_02	Threemile Creek	Threemile Creek - source to mouth
ID17040220SK014_02	West Fork Threemile Creek	Threemile Creek - source to mouth
ID17040220SK019_04		Chimney Creek - source to mouth
ID17040220SK019_04	Chimney Creek	Chimney Creek - source to mouth
ID17040220SK020_02		Negro Creek - source to mouth
ID17040220SK020_02	Maniece Creek	Negro Creek - source to mouth

Assessment Unit	Stream Name	Water Body Name
ID17040220SK020_02	Negro Creek	Negro Creek - source to mouth
ID17040220SK022_02		Malad River - source to mouth
ID17040220SK022_02	Malad River	Malad River - source to mouth
ID17040220SK022_03	Malad River	Malad River - source to mouth
ID17040221SK000_02		Unclassified waters in CU 17040221
ID17040221SK000_02	Cottonwood Slough	Unclassified waters in CU 17040221
ID17040221SK000_02	East Main Canal	Unclassified waters in CU 17040221
ID17040221SK000_02	Jim Byrns Slough	Unclassified waters in CU 17040221
ID17040221SK000_02	West Main Canal	Unclassified waters in CU 17040221
ID17050101SW001_03	Dry Creek	Snake River - Browns Creek to C.J. Strike Dam
ID17050101SW007_02		Pot Hole Creek - source to mouth
ID17050101SW007_02	Pot Hole Creek	Pot Hole Creek - source to mouth
ID17050101SW007_02	Pot Hole Reservoir	Pot Hole Creek - source to mouth
ID17050101SW009_02		Rosevear Gulch - source to mouth
ID17050101SW009_03		Rosevear Gulch - source to mouth
ID17050101SW020_02		Mountain Home Reservoir
ID17050101SW020_02	Rattlesnake Creek	Mountain Home Reservoir
ID17050101SW021_02		Canyon Creek - Fraiser Reservoir Dam to mouth
ID17050101SW021_05		Canyon Creek - Fraiser Reservoir Dam to mouth
ID17050101SW021_05	Canyon Creek	Canyon Creek - Fraiser Reservoir Dam to mouth
ID17050101SW023_02		Canyon Creek - confluence of Syrup and Long Tom Creeks to Fraiser Reservoir
ID17050101SW026_02		Squaw Creek - source to mouth
ID17050101SW026_02	Ditto Creek	Squaw Creek - source to mouth
ID17050101SW026_02	Dry Creek	Squaw Creek - source to mouth
ID17050101SW026_02	Mud Springs Creek	Squaw Creek - source to mouth
ID17050101SW026_04		Squaw Creek - source to mouth
ID17050101SW026_04	Squaw Creek	Squaw Creek - source to mouth
ID17050102SW002_02		Jacks Creek - confluence of Little and Big Jacks Creeks to C.J. Strike Reservoir
ID17050102SW002_03		Jacks Creek - confluence of Little and Big Jacks Creeks to C.J. Strike Reservoir
ID17050102SW003_02		Little Jacks Creek - source to mouth
ID17050102SW003_02	Little Jacks Creek	Little Jacks Creek - source to mouth
ID17050102SW003_02	O X Prong	Little Jacks Creek - source to mouth
ID17050102SW003_02	Rattlesnake Creek	Little Jacks Creek - source to mouth

Assessment Unit	Stream Name	Water Body Name
ID17050102SW003_03		Little Jacks Creek - source to mouth
ID17050102SW003_03	Little Jacks Creek	Little Jacks Creek - source to mouth
ID17050102SW003_03	O X Prong	Little Jacks Creek - source to mouth
ID17050102SW004_02		Big Jacks Creek -source to mouth
ID17050102SW004_02	Big Jacks Creek	Big Jacks Creek -source to mouth
ID17050102SW004_02	Willies Creek	Big Jacks Creek -source to mouth
ID17050102SW004_03		Big Jacks Creek -source to mouth
ID17050102SW004_03	Big Jacks Creek	Big Jacks Creek -source to mouth
ID17050102SW008_02		Sugar Valley Creek - source to mouth
ID17050102SW008_02	Sugar Creek	Sugar Valley Creek - source to mouth
ID17050102SW008_03		Sugar Valley Creek - source to mouth
ID17050102SW008_03	Sugar Creek	Sugar Valley Creek - source to mouth
ID17050102SW009_02		Bruneau River - Hot Creek to C.J. Strike Reservoir
ID17050102SW009_02	Beeroth Canal	Bruneau River - Hot Creek to C.J. Strike Reservoir
ID17050102SW009_02	Hot Spring Canal	Bruneau River - Hot Creek to C.J. Strike Reservoir
ID17050102SW011_03		Bruneau River - Clover Creek (East Fork Bruneau River) to Hot Creek
ID17050102SW014_02		Sheep Creek - Idaho/Nevada border to mouth
ID17050102SW014_02	Brush Creek	Sheep Creek - Idaho/Nevada border to mouth
ID17050102SW020_03		Bruneau River - Idaho/Nevada border to Jarbidge River
ID17050102SW020_03	Deep Creek	Bruneau River - Idaho/Nevada border to Jarbidge River
ID17050102SW026_02		Unnamed tributary - source to mouth (T11S, R07E, Sec. 27)
ID17050102SW026_03		Unnamed tributary - source to mouth (T11S, R07E, Sec. 27)
ID17050102SW028_02		Clover Creek (East Fork Bruneau River) - confluence of Big Flat, Three, and Deadwood Creeks to mouth
ID17050102SW028_03		Clover Creek (East Fork Bruneau River) - confluence of Big Flat, Three, and Deadwood Creeks to mouth
ID17050102SW035_02		Buck Flat Draw - source to mouth
ID17050102SW035_04		Buck Flat Draw - source to mouth
ID17050102SW035_04	Clover Creek	Buck Flat Draw - source to mouth
ID17050103SW010_02		West Rabbit Creek - source to mouth
ID17050103SW010_02	Rabbit Creek	West Rabbit Creek - source to mouth
ID17050103SW010_03		West Rabbit Creek - source to mouth
ID17050103SW010_03	Rabbit Creek	West Rabbit Creek - source to mouth

Assessment Unit	Stream Name	Water Body Name
ID17050103SW012_02		Sinker Creek - source to mouth
ID17050103SW012_02	Diamond Creek	Sinker Creek - source to mouth
ID17050103SW012_02	North Fork Sinker Creek	Sinker Creek - source to mouth
ID17050103SW012_02	South Fork Diamond Creek	Sinker Creek - source to mouth
ID17050103SW012_02	Tiddie Creek	Sinker Creek - source to mouth
ID17050103SW013_02		Fossil Creek - source to mouth
ID17050103SW013_02	Fossil Creek	Fossil Creek - source to mouth
ID17050103SW013_03	Fossil Creek	Fossil Creek - source to mouth
ID17050103SW015_05	Catherine Creek	Catherine Creek - confluence of Hart and Picket Creeks to mouth
ID17050103SW017_02		Bates Creek - source to mouth
ID17050103SW017_02	Bates Creek	Bates Creek - source to mouth
ID17050103SW018_02		Hart Creek - source to mouth
ID17050103SW018_02	Hart Creek	Hart Creek - source to mouth
ID17050103SW018_02	Little Hart Creek	Hart Creek - source to mouth
ID17050103SW018_03		Hart Creek - source to mouth
ID17050103SW018_03	Hart Creek	Hart Creek - source to mouth
ID17050103SW022_02		McKeeth Wash - source to mouth
ID17050103SW022_02	McKeeth Wash	McKeeth Wash - source to mouth
ID17050103SW022_03		McKeeth Wash - source to mouth
ID17050103SW022_03	McKeeth Wash	McKeeth Wash - source to mouth
ID17050103SW023_02		Vinson Wash - source to mouth
ID17050103SW023_02	Jensen Wash	Vinson Wash - source to mouth
ID17050103SW023_02	Poison Creek	Vinson Wash - source to mouth
ID17050103SW024_02		Shoofly Creek - source to mouth
ID17050103SW024_02	East Fork Shoofly Creek	Shoofly Creek - source to mouth
ID17050103SW024_02	Fall Creek	Shoofly Creek - source to mouth
ID17050103SW024_02	Lone Juniper Creek	Shoofly Creek - source to mouth
ID17050103SW024_02	Poison Creek	Shoofly Creek - source to mouth
ID17050103SW024_02	Snow Creek	Shoofly Creek - source to mouth
ID17050103SW024_02	West Fork Shoofly Creek	Shoofly Creek - source to mouth
ID17050103SW025_03	Corder Creek	Corder Creek - source to mouth
ID17050104SW003_04	Piute Creek	Piute Creek - source to mouth

Assessment Unit	Stream Name	Water Body Name
ID17050104SW004_04	Juniper Creek	Juniper Creek - Juniper Basin Reservoir Dam to mouth
ID17050104SW005_02		Juniper Basin Reservoir
ID17050104SW005_02	Juniper Creek	Juniper Basin Reservoir
ID17050104SW006_02		Owyhee River - Idaho/Nevada border to Juniper Creek
ID17050104SW006_02	Billy Shaw Slough	Owyhee River - Idaho/Nevada border to Juniper Creek
ID17050104SW006_02	Ross Slough	Owyhee River - Idaho/Nevada border to Juniper Creek
ID17050104SW006_02	Thacker Slough	Owyhee River - Idaho/Nevada border to Juniper Creek
ID17050104SW007_05		Blue Creek - Blue Creek Reservoir Dam to mouth
ID17050104SW007_05	Blue Creek	Blue Creek - Blue Creek Reservoir Dam to mouth
ID17050104SW010_02		Payne Creek - source to mouth
ID17050104SW010_02	Payne Creek	Payne Creek - source to mouth
ID17050104SW010_02	Pig Creek	Payne Creek - source to mouth
ID17050104SW010_03	Payne Creek	Payne Creek - source to mouth
ID17050104SW010_03	Squaw Creek	Payne Creek - source to mouth
ID17050104SW011_02		Squaw Creek - source to mouth
ID17050104SW011_02	Indian Creek	Squaw Creek - source to mouth
ID17050104SW011_02	Moorcastle Creek	Squaw Creek - source to mouth
ID17050104SW011_02	Squaw Creek	Squaw Creek - source to mouth
ID17050104SW012_02		Little Blue Creek - source to mouth
ID17050104SW012_02	Little Blue Creek	Little Blue Creek - source to mouth
ID17050104SW012_02	Shoofly Creek	Little Blue Creek - source to mouth
ID17050104SW013_02		Blue Creek - source to Blue Creek Reservoir Dam
ID17050104SW013_02	Blue Creek	Blue Creek - source to Blue Creek Reservoir Dam
ID17050104SW022_03	Yatahoney Creek	Yatahoney Creek - source to mouth
ID17050104SW026_03		Deep Creek - source to mouth
ID17050104SW026_03	Anne Valley Creek	Deep Creek - source to mouth
ID17050104SW026_03	Current Creek	Deep Creek - source to mouth
ID17050104SW026_03	Hurry Back Creek	Deep Creek - source to mouth
ID17050104SW027_05	Dickshooter Creek	Dickshooter Creek - source to mouth
ID17050104SW029_02		Camas Creek - source to mouth
ID17050104SW029_02	Camas Creek	Camas Creek - source to mouth
ID17050105SW002_02		Spring Creek - source to mouth
ID17050105SW002_02	Spring Creek	Spring Creek - source to mouth

Assessment Unit	Stream Name	Water Body Name
ID17050105SW004_02		Homer Wells Reservoir
ID17050105SW005_03		Coyote Flat - source to mouth
ID17050106SW001_02		Little Owyhee River - Idaho/Nevada border to mouth
ID17050106SW001_02	Little Owyhee River	Little Owyhee River - Idaho/Nevada border to mouth
ID17050107SW001_02		Owyhee River - South Fork Owyhee River to Idaho/Oregon border
ID17050107SW001_02	Dukes Creek	Owyhee River - South Fork Owyhee River to Idaho/Oregon border
ID17050107SW007_02		Cottonwood Creek - source to mouth
ID17050107SW007_02	Cottonwood Creek	Cottonwood Creek - source to mouth
ID17050107SW013_02		Cherry Creek - source to Idaho/Oregon border
ID17050107SW013_02	Anderson Reservoir	Cherry Creek - source to Idaho/Oregon border
ID17050107SW013_02	Cherry Creek	Cherry Creek - source to Idaho/Oregon border
ID17050107SW013_02	Dougherty Creek	Cherry Creek - source to Idaho/Oregon border
ID17050107SW013_02	Garten Creek	Cherry Creek - source to Idaho/Oregon border
ID17050107SW013_02	Whitby Reservoir	Cherry Creek - source to Idaho/Oregon border
ID17050107SW013_02	Wilson Creek	Cherry Creek - source to Idaho/Oregon border
ID17050107SW014_02		Soldier Creek - source to Idaho/Oregon border
ID17050107SW014_02	Coyote Creek	Soldier Creek - source to Idaho/Oregon border
ID17050107SW014_02	Sheep Creek	Soldier Creek - source to Idaho/Oregon border
ID17050107SW014_02	Soldier Creek	Soldier Creek - source to Idaho/Oregon border
ID17050107SW014_02	Stove Creek	Soldier Creek - source to Idaho/Oregon border
ID17050107SW014_02	Toppin Creek	Soldier Creek - source to Idaho/Oregon border
ID17050108SW011_02		Rose Creek - source to mouth
ID17050108SW011_02	Rose Creek	Rose Creek - source to mouth
ID17050108SW016_02		Deer Creek - source to mouth
ID17050108SW016_02	Deer Creek	Deer Creek - source to mouth
ID17050112SW002_02		Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Cinch Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Cow Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Deep Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Dutch Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Irish Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Lambing Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Nevins Creek	Arrowrock Reservoir (Boise River)

Assessment Unit	Stream Name	Water Body Name
ID17050112SW002_02	Nibbler Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Trail Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Twin Creek	Arrowrock Reservoir (Boise River)
ID17050112SW002_02	Willow Creek	Arrowrock Reservoir (Boise River)
ID17050113SW002a_02		Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW002a_02	Case Creek	Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW002a_02	Cottonwood Creek	Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW002a_02	Packsaddle Creek	Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW002a_02	Porcupine Creek	Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW002a_02	Salt Creek	Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW002a_02	Willow Creek	Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW002a_03	Willow Creek	Willow Creek - Cottonwood Creek to Arrowrock Reservoir
ID17050113SW007_02		Little Camas Creek Reservoir
ID17050113SW007_02	Buck Creek	Little Camas Creek Reservoir
ID17050113SW007_02	Castle Rock Creek	Little Camas Creek Reservoir
ID17050113SW007_02	Cat Creek	Little Camas Creek Reservoir
ID17050113SW007_02	Chimney Creek	Little Camas Creek Reservoir
ID17050114SW003_02		Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	Cow Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	East Fork Slater Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	Indian Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	North Indian Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	Ridenbaugh Canal	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	Sand Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	Sheep Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	Slater Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW003_02	West Fork Slater Creek	Indian Creek - source to Sugar Ave.(T03N, R02W, Sec. 15)
ID17050114SW013_02		Dry Creek - source to mouth
ID17050114SW013_02	Currant Creek	Dry Creek - source to mouth
ID17050114SW013_02	Custer Creek	Dry Creek - source to mouth
ID17050114SW013_02	Daniels Creek	Dry Creek - source to mouth
ID17050114SW013_02	Dry Creek	Dry Creek - source to mouth
ID17050114SW013_02	Goose Creek	Dry Creek - source to mouth

Assessment Unit	Stream Name	Water Body Name
ID17050114SW013_02	McFarland Creek	Dry Creek - source to mouth
ID17050114SW013_02	North Fork Daniels Creek	Dry Creek - source to mouth
ID17050114SW013_02	Shingle Creek	Dry Creek - source to mouth
ID17050114SW013_02	South Fork Daniels Creek	Dry Creek - source to mouth
ID17050114SW013_02	Spring Valley Creek	Dry Creek - source to mouth
ID17050114SW014_02		Big/Little Gulch Creek complex
ID17050114SW014_02	Big Gulch Creek	Big/Little Gulch Creek complex
ID17050114SW014_02	Little Gulch Creek	Big/Little Gulch Creek complex
ID17050114SW016_02		Langley/Graveyard Gulch complex
ID17050114SW016_02	C-Line Canal West	Langley/Graveyard Gulch complex
ID17050122SW019_03	Indian Creek	Indian Creek - source to mouth
ID17050122SW021_03	Little Willow Creek	Little Willow Creek - source to Paddock Valley Reservoir
ID17050123SW016_02		North Fork Payette River - Payette Lake to Cascade Reservoir
ID17050123SW016_02	Duffner Creek	North Fork Payette River - Payette Lake to Cascade Reservoir
ID17050123SW016_02	Mill Creek	North Fork Payette River - Payette Lake to Cascade Reservoir
ID17050123SW016_02	Williams Creek	North Fork Payette River - Payette Lake to Cascade Reservoir
ID17050124SW010_02		Mill Creek - source to mouth
ID17050124SW010_02	Mill Creek	Mill Creek - source to mouth
ID17050124SW012_02		Grays Creek - source to mouth
ID17050124SW012_02	Grays Creek	Grays Creek - source to mouth
ID17050124SW012_02	Murphy Creek	Grays Creek - source to mouth
ID17050124SW012_02	North Fork Grays Creek	Grays Creek - source to mouth
ID17050124SW012_02	South Fork Grays Creek	Grays Creek - source to mouth
ID17050124SW012_02	Thorn Creek	Grays Creek - source to mouth
ID17050124SW013_02	Bacon Creek	Bacon Creek - source to mouth
ID17050124SW026_02		Spring Creek - source to mouth
ID17050124SW026_02	Camp Creek	Spring Creek - source to mouth
ID17050124SW026_02	Spring Creek	Spring Creek - source to mouth
ID17050124SW029_03	Sage Creek	Sage Creek - source to mouth
ID17050201SW002_02		Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam
ID17050201SW002_02	Cougar Creek	Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam
ID17050201SW002_02	Jacobs Ladder Creek	Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam
ID17050201SW002_02	Myra Tree Creek	Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam

Assessment Unit	Stream Name	Water Body Name
ID17050201SW002_02	Scorpion Creek	Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam
ID17050201SW002_02	Summer Creek	Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam
ID17050201SW002_02	Warm Springs	Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam
ID17050201SW002_02	Williamson Creek	Snake River (Oxbow Reservoir) - Brownlee Dam to Oxbow Dam
ID17060103SL011_02		Captain John Creek - source to mouth
ID17060103SL011_02	Browns Creek	Captain John Creek - source to mouth
ID17060103SL011_02	Captain John Creek	Captain John Creek - source to mouth
ID17060103SL011_02	Madden Creek	Captain John Creek - source to mouth
ID17060103SL011_02	South Fork Captain John Creek	Captain John Creek - source to mouth
ID17060108CL033b_02		Cedar Creek - T43N, R05W, Sec. 28 to Idaho/Washington border
ID17060108CL033b_02	Cedar Creek	Cedar Creek - T43N, R05W, Sec. 28 to Idaho/Washington border
ID17060109CL002_02		North Fork Pine Creek - source to Idaho/Washington border
ID17060109CL002_02	North Fork Pine Creek	North Fork Pine Creek - source to Idaho/Washington border
ID17060201SL001_03		Salmon River - Pennal Gulch to Pahsimeroi River
ID17060201SL001_03	Ellis Creek	Salmon River - Pennal Gulch to Pahsimeroi River
ID17060201SL001_03	Hanna Slough	Salmon River - Pennal Gulch to Pahsimeroi River
ID17060201SL001_03	Salmon River	Salmon River - Pennal Gulch to Pahsimeroi River
ID17060201SL002_02		Morgan Creek - West Creek to mouth
ID17060201SL002_02	Blue Creek	Morgan Creek - West Creek to mouth
ID17060201SL002_02	Gooseberry Creek	Morgan Creek - West Creek to mouth
ID17060201SL002_02	Sage Creek	Morgan Creek - West Creek to mouth
ID17060201SL007_02		Challis Creek - Darling Creek to mouth
ID17060201SL014_02		Salmon River - Garden Creek to Pennal Gulch
ID17060201SL014_02	Camp Creek	Salmon River - Garden Creek to Pennal Gulch
ID17060201SL014_03		Salmon River - Garden Creek to Pennal Gulch
ID17060201SL014_03	Camp Creek	Salmon River - Garden Creek to Pennal Gulch
ID17060201SL014_03	Garden Creek	Salmon River - Garden Creek to Pennal Gulch
ID17060201SL014_03	Hanna Slough	Salmon River - Garden Creek to Pennal Gulch
ID17060201SL014_04		Salmon River - Garden Creek to Pennal Gulch
ID17060201SL027_02		Salmon River - Thompson Creek to Squaw Creek
ID17060201SL027_02	Coal Camp Fork	Salmon River - Thompson Creek to Squaw Creek
ID17060201SL027_02	French Creek	Salmon River - Thompson Creek to Squaw Creek

Assessment Unit	Stream Name	Water Body Name
ID17060201SL027_02	Pistol Creek	Salmon River - Thompson Creek to Squaw Creek
ID17060201SL027_02	Spring Creek	Salmon River - Thompson Creek to Squaw Creek
ID17060201SL027_03	French Creek	Salmon River - Thompson Creek to Squaw Creek
ID17060201SL063_02		Salmon River - Redfish Lake Creek to Valley Creek
ID17060201SL072_02		Salmon River - Fisher Creek to Decker Creek
ID17060201SL101_02		Sullivan Creek - source to mouth
ID17060201SL101_02	Potaman Creek	Sullivan Creek - source to mouth
ID17060201SL101_02	Sullivan Creek	Sullivan Creek - source to mouth
ID17060201SL116_02		Pine Creek - source to mouth
ID17060201SL116_02	Pine Creek	Pine Creek - source to mouth
ID17060201SL117_02		McDonald Creek - source to mouth
ID17060201SL117_02	McDonald Creek	McDonald Creek - source to mouth
ID17060201SL124_02		Road Creek - Corral Basin Creek to mouth
ID17060201SL129_02		Spar Canyon Creek - source to mouth
ID17060201SL129_03		Spar Canyon Creek - source to mouth
ID17060201SL130_02		Bradshaw Gulch - source to mouth
ID17060201SL131_02		Warm Spring Creek - Hole-in-Rock Creek to mouth
ID17060201SL131_02	Lone Pine Creek	Warm Spring Creek - Hole-in-Rock Creek to mouth
ID17060201SL131_03	Lone Pine Creek	Warm Spring Creek - Hole-in-Rock Creek to mouth
ID17060201SL134_02		Hole-in-Rock Creek - source to mouth
ID17060201SL134_02	Hole-in-Rock Creek	Hole-in-Rock Creek - source to mouth
ID17060201SL135_02		Pennal Gulch - source to mouth
ID17060202SL001_02		Pahsimeroi River - Patterson Creek to mouth
ID17060202SL001_02	Anderson Spring	Pahsimeroi River - Patterson Creek to mouth
ID17060202SL001_02	John Short Springs	Pahsimeroi River - Patterson Creek to mouth
ID17060202SL012_03		Unnamed tributary - source to mouth (T12N, R23E, Sec. 22)
ID17060202SL012_03	Doublespring Creek	Unnamed tributary - source to mouth (T12N, R23E, Sec. 22)
ID17060202SL013_03	Doublespring Creek	Doublespring Creek - Christian Gulch to mouth
ID17060202SL015_03	Doublespring Creek	Doublespring Creek - source to Christian Gulch
ID17060204SL032a_03	Little Timber Creek	Little Timber Creek - source to diversion (T15N, R25E, Sec. 13)
ID17060204SL039_02	Meadow Lake Creek	Meadow Lake Creek - source to mouth
ID17060204SL040_02		Texas Creek - source to Meadow Lake Creek
ID17060204SL040_02	Texas Creek	Texas Creek - source to Meadow Lake Creek

Assessment Unit	Stream Name	Water Body Name
ID17060204SL044_02		Divide Creek - source to mouth
ID17060204SL044_02	Divide Creek	Divide Creek - source to mouth
ID17060204SL044_02	McGinty Creek	Divide Creek - source to mouth
ID17060204SL049_02		Powderhorn Gulch - source to mouth
ID17060204SL053_02		Peterson Creek - source to mouth
ID17060204SL053_02	Left Fork Peterson Creek	Peterson Creek - source to mouth
ID17060204SL053_02	Peterson Creek	Peterson Creek - source to mouth
ID17060204SL053_02	Right Fork Peterson Creek	Peterson Creek - source to mouth
ID17060209SL011_02		Salmon River - Little Salmon River to Slate Creek
ID17060209SL011_02	Chair Creek	Salmon River - Little Salmon River to Slate Creek
ID17060209SL011_02	Christie Creek	Salmon River - Little Salmon River to Slate Creek
ID17060209SL011_02	Crawford Creek	Salmon River - Little Salmon River to Slate Creek
ID17060209SL011_02	Elfers Creek	Salmon River - Little Salmon River to Slate Creek
ID17060209SL011_02	Lightning Creek	Salmon River - Little Salmon River to Slate Creek
ID17060209SL011_02	Rhett Creek	Salmon River - Little Salmon River to Slate Creek
ID17060209SL011_02	Sherwin Creek	Salmon River - Little Salmon River to Slate Creek
ID17060209SL027_02	Van Creek	Van Creek - source to mouth
ID17060209SL047_02		Whitebird Creek - confluence of North and South Fork Whitebird Creeks to mouth
ID17060209SL047_02	Chapman Creek	Whitebird Creek - confluence of North and South Fork Whitebird Creeks to mouth
ID17060209SL047_02	Cottonwood Creek	Whitebird Creek - confluence of North and South Fork Whitebird Creeks to mouth
ID17060209SL047_02	Price Creek	Whitebird Creek - confluence of North and South Fork Whitebird Creeks to mouth
ID17060304CL003_02	Hoodoo Creek	West Fork Clear Creek - source to mouth
ID17060304CL003_02	Lost Mule Creek	West Fork Clear Creek - source to mouth
ID17060304CL003_02	West Fork Clear Creek	West Fork Clear Creek - source to mouth
ID17060306CL044_02		Potlatch River - Big Bear Creek to mouth
ID17060306CL060_02		Little Bear Creek - source to mouth
ID17060306CL060_02	Bergs Creek	Little Bear Creek - source to mouth
ID17060306CL060_02	Nora Creek	Little Bear Creek - source to mouth
ID17060306CL060_02	Spring Valley Creek	Little Bear Creek - source to mouth

[a] CU = cataloging unit

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Appendix M. Waters on Tribal Land That Will Be Affected by the New Policy in the 2012 Integrated Report

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Coeur d'Alene Tribe

Assessment Unit	Water Body Name
ID17010303PN009_02	Black Lake - Stream order 1 & 2
ID17010303PN005_02	Fighting Creek - headwaters to tribal boundary
ID17010306PN003_02	Rock Creek
ID17010304PN069_02	Deep Creek - source to mouth
ID17010304PN002_03	Plummer Creek - source to mouth
ID17010304PN002_04	Plummer Creek - source to mouth
ID17010304PN003_02	Pedee Creek - source to mouth
ID17010304PN004_02	Benewah Creek - source to mouth
ID17010304PN004_03	Benewah Creek - source to mouth
ID17010304PN005_02	St. Joe River - St. Maries River to mouth
ID17010303PN001_02	Tribs to Coeur d'Alene Lake
ID17010306PN002_04	Little Hangman Creek
ID17060109CL003_02	Unnamed tributaries - source to Idaho/Washington border (T44N, R05W, Sec. 18)
ID17010304PN001_02	01 & 02 Tribs to Chatcolet Lake
ID17010304PN001L_0L	Chatcolet Lake
ID17010304PN002_02	Plummer Creek - source to mouth
ID17010306PN001_03a	Hangman Creek Tribal Boundary to WA State Line
ID17010303PN009_03	Black Lake - Stream order 3
ID17010303PN009L_0L	Black Lake
ID17010304PN009_02	John Creek - source to mouth
ID17010303PN005_03	Fighting Creek - source to mouth
ID17010303PN006_02	Lake Creek - Idaho/Washington border to mouth
ID17010303PN006_03	Lake Creek - Idaho/Washington border to mouth
ID17010303PN006_04	Lake Creek - Idaho/Washington border to mouth
ID17010303PN010_02	Medicine Lake - Stream order 1 & 2
ID17010303PN011_02	Willow Creek - source to mouth
ID17010303PN012_02	Evans Creek - source to mouth
ID17010303PN012_03	Evans Creek - source to mouth
ID17010303PN015_02	Latour Creek - source to mouth
ID17010304PN005_06	St. Joe River - St. Maries River to mouth
ID17010304PN006_02	Cherry Creek - source to mouth
ID17010304PN007_02	St. Maries River - Santa Creek to mouth
ID17010304PN008_02	Alder Creek - source to mouth
ID17010306PN002_03	Moctileme Creek
ID17010306PN001_02	Hangman Creek - Tribs to Hangman Cr from Headwaters to WA
ID17010306PN002_02	Little Hangman Creek - source to Idaho/Washington border
ID17010304PN027_02	St. Joe River - North Fork St. Joe River to St. Maries River
ID17010304PN027_05	St. Joe River - North Fork St. Joe River to St. Maries River
ID17010306PN004_02	Rose Creek
ID17010306PN004_03	Middle Fork Rock Creek - source to Idaho/Washington border
ID17010306PN005_02	North Fork Rock Creek
ID17010306PN005_03	North Fork Rock Creek - source to Idaho/Washington border

Duck Valley Shoshone-Paiute Tribe

Assessment Unit	Water Body Name
ID17050104SW018_02	Unnamed tributary to Ross Lake
ID17050102SW016_01L	Otter Reservoir
ID17050104SW008_02L	Boyle Creek Reservoir
ID17050104SW007_02L	Unnamed lakes in Duck Valley Indian Reservation
ID17050104SW006_02	Thacker and Ross Sloughs - 1st and 2nd order
ID17050104SW006_03	Ross Slough - 3rd order
ID17050104SW006_05	Owyhee River - 5th order (above Blue Creek)
ID17050104SW006_06	Owyhee River - Blue Creek to Juniper Creek
ID17050104SW007_02	Blue Creek: 1st and 2nd order tribs above Blue Cr. Reservoir
ID17050104SW007_03	Blue Creek - Blue Creek Reservoir to Little Blue Creek
ID17050104SW007_05	Blue Creek - Shoofly Creek to Owyhee River
ID17050104SW008_02	Boyle Creek - 1st and 2nd order
ID17050102SW016_04	Marys Creek - 4th order
ID17050104SW004_02	Juniper Creek - 1st and 2nd order
ID17050104SW005_02	Juniper Creek - 1st and 2nd order
ID17050102SW016_02	Marys Creek - 1st and 2nd order
ID17050102SW016_03	Marys Creek - 3rd order
ID17050104SW008_03	Boyle Creek - 3rd order
ID17050104SW008L_0L	Mountain View Lake
ID17050104SW009_02	Damon Trail, Mud, Papoose, Bell and Miller Creeks
ID17050104SW009_03	Dry Creek - 3rd order
ID17050104SW010_03	Payne Creek - 3rd order
ID17050104SW011_02	Squaw Creek - 1st and 2nd order
ID17050104SW011_03	Squaw Creek - 3rd order
ID17050104SW016_02	Unnamed tributary to Little Jarvis Lake
ID17050104SW021_02	Unnamed tributary to Owyhee River near Ross Lake

Fort Hall Indian Reservation

Assessment Unit	Water Body Name
ID17040206SK006_03	Moonshine Creek - source to mouth
ID17040206SK017_02	South Fork Ross Fork - source to mouth
ID17040207SK002_02	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main
ID17040209SK010_02	East Fork Rock Creek - source to mouth
ID17040208SK019_02	01 & 02 tribs to Chesterfield Reservoir
ID17040208SK019L_0L	Chesterfield Reservoir
ID17040208SK020_02	Portneuf R.-tributaries - source to Chesterfield Reservoir
ID17040208SK020_03	Portneuf River - source to Chesterfield Reservoir
ID17040206SK013_02	Michaud Creek - source to mouth
ID17040207SK002_03	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main
ID17040207SK001_02	Blackfoot River - Fort Hall Main Canal diversion to mouth
ID17040206SK021_02	Big Jimmy Creek - source to American Falls Reservoir
ID17040207SK002_04	Blackfoot River - Blackfoot Reservoir Dam to Fort Hall Main
ID17040206SK001_02	American Falls Reservoir 1st and 2nd order tribs
ID17040208SK021_02a	Little Toponce Creek

Fort Hall Indian Reservation

Assessment Unit	Water Body Name
ID17040208SK021_02b	North Fork Toponce Creek
ID17040208SK021_02e	Upper Toponce Creek
ID17040206SK022_04	Snake River
ID17040208SK001_02	Porteneuf River - Marsh Creek to American Falls Reservoir
ID17040206SK001_05	American Falls Reservoir - Bannock Creek
ID17040206SK002_02	Bannock Creek - source to American Falls Reservoir
ID17040206SK002_04	Bannock Creek - source to American Falls Reservoir
ID17040206SK002_05	Bannock Creek - source to American Falls Reservoir
ID17040206SK003_02	Starlight Creek - source to mouth
ID17040206SK013_03	Michaud Creek
ID17040206SK014_02	Ross Fork - Gibson Canal to American Falls Reservoir
ID17040206SK014_04	Ross Fork - Gibson Canal to American Falls Reservoir
ID17040206SK012_02	Midnight Creek - source to mouth
ID17040206SK006_04	Moonshine Creek - source to mouth
ID17040207SK003_02	Garden Creek - source to mouth
ID17040207SK004_02	Wood Creek - source to mouth
ID17040207SK004_03	Wood Creek - source to mouth
ID17040206SK010_02	Rattlesnake Creek - source to mouth
ID17040206SK010_02a	Crystal Creek
ID17040207SK002_02a	Beaver Creek
ID17040207SK002_02b	Deadman Creek
ID17040206SK010_04	Rattlesnake Creek - lower
ID17040206SK015_02	Ross Fork - Indian Creek to Gibson Canal
ID17040206SK001L_0L	American Falls Reservoir (Snake River)
ID17040206SK006_02	Moonshine Creek - source to mouth
ID17040206SK022_02	Snake River - river mile 791
ID17040206SK023_02	Jeff Cabin Creek - source to mouth
ID17040206SK015_04	Ross Fork - Indian Creek to Gibson Canal
ID17040206SK016_02	Indian Creek - source to mouth
ID17040206SK017_03	South Fork Ross Fork - source to mouth
ID17040206SK018_02	Ross Fork - source to South Fork Ross Fork
ID17040206SK018_03	Ross Fork - source to South Fork Ross Fork
ID17040206SK018_04	Ross Fork - source to South Fork Ross Fork
ID17040206SK019_02	Clear Creek - source to American Falls Reservoir
ID17040206SK020_02	Spring Creek - source to American Falls Reservoir
ID17040206SK007_02	Sawmill Creek - source to mouth
ID17040206SK007_03	Sawmill Creek - source to mouth
ID17040206SK008_02	West Fork Bannock Creek - source to mouth
ID17040207SK001_05	Blackfoot River - Fort Hall Main Canal diversion to mouth
ID17040206SK004_02	Blind Spring - source to mouth
ID17040208SK001_05	Porteneuf River - Marsh Creek to American Falls Reservoir

Kootenai Tribe of Idaho

Assessment Unit	Water Body Name
ID17010104PN012_08	Kootenai River - Deep Creek to and including Shorty's Island

Nez Perce Tribe

Assessment Unit	Water Body Name
ID17060306CL040_02	Whiskey Creek - source to mouth
ID17060306CL043_03	Pine Creek - source to mouth
ID17060306CL005_02	Sweetwater Creek - Webb Creek to mouth
ID17060306CL006_03	Sweetwater Creek - source to Webb Creek
ID17060304CL011_02	Maggie Creek - source to mouth
ID17060108CL001_02	Cow Creek - source to Idaho/Washington border
ID17060304CL002_02	Clear Creek - South Fork Clear Creek to mouth
ID17060304CL001_02	Middle Fork Clearwater River - confluence of Lochsa
ID17060304CL001_05	Middle Fork Clearwater River - confluence of Lochsa
ID17060306CL064_03	Little Potlatch Creek - source to mouth
ID17060306CL003_02a	Mann's Reservoir
ID17060306CL044_02	Potlatch River - Big Bear Creek to mouth
ID17060306CL044_06	Potlatch River - 6th Order
ID17060306CL018_04	Little Canyon Creek - confluence of Holes and Long Hollow Cr
ID17060306CL019_02	Holes Creek - source to mouth
ID17060304CL002_04	Clear Creek - South Fork Clear Creek to mouth
ID17060306CL039_02	Shanghai Creek - and tributaries
ID17060306CL067_02	Hatwai Creek - source to mouth
ID17060308CL001_06	North Fork Clearwater River - 6th Order
ID17060308CL002_02	Dworshak Reservoir tributaries
ID17060305CL006_02	Stockney Creek - source to mouth
ID17060306CL016_03	Big Canyon Creek - source to mouth
ID17060305CL011_02	Butcher Creek - source to mouth
ID17060306CL008_02	Lapwai Creek - Winchester Lake to Sweetwater Creek
ID17060306CL016_04	Big Canyon Creek - source to mouth
ID17060306CL017_02	Cold Springs Creek - source to mouth
ID17060306CL017_03	Cold Springs Creek - source to mouth
ID17060306CL065_02	Howard Gulch - source to mouth
ID17060306CL066_02	Catholic Creek - source to mouth
ID17060306CL040_03	Whiskey Creek - source to mouth
ID17060306CL041_02	Bedrock Creek - source to mouth
ID17060306CL041_03	Bedrock Creek - source to mouth
ID17060306CL042_02	Louse Creek - source to mouth
ID17060306CL043_02	Pine Creek - source to mouth
ID17060305CL001_05	South Fork Clearwater River - Butcher Creek to mouth
ID17060305CL001_02	South Fork Clearwater River - Butcher Creek to mouth
ID17060305CL004_02	Red Rock Creek - Red Rock Creek waterfall to mouth
ID17060305CL004_03	Red Rock Creek - Red Rock Creek waterfall to mouth
ID17060305CL005_02	Red Rock Creek - source to Red Rock Creek waterfall
ID17060305CL005_03	Red Rock Creek - source to Red Rock Creek waterfall
ID17060306CL039_04	Orofino Creek - source to mouth
ID17060305CL010_02	Threemile Creek - source to unnamed tributary
ID17060305CL010_03	Threemile Creek - unnamed tributary to mouth
ID17060305CL002_04	Cottonwood Creek - 4th order; waterfall to mouth
ID17060308CL002_06L	Dworshak Reservoir

Nez Perce Tribe

Assessment Unit	Water Body Name
ID17060306CL016_02	Big Canyon Creek - source to mouth
ID17060306CL018_02	Little Canyon Creek - confluence of Holes and Long Hollow Cr
ID17060306CL006_02	Sweetwater Creek - source to Webb Creek
ID17060306CL002_02	Clearwater River - Potlatch River to Lower Granite Dam pool
ID17060306CL002_07	Clearwater River - Potlatch River to Lower Granite Dam pool
ID17060306CL003_02	Lindsay Creek - source to mouth
ID17060305CL002_02	Cottonwood Creek - Cottonwood Creek waterfall (9.0 miles upstream)
ID17060306CL033_02	Big Creek - source to mouth
ID17060306CL034_02	Jim Ford Creek - Jim Ford Creek waterfall (12.5 miles upstream)
ID17060306CL005_04	Sweetwater Creek - Webb Creek to mouth
ID17060306CL006_04	Sweetwater Creek - source to Webb Creek
ID17060306CL004_02	Lapwai Creek - Sweetwater Creek to mouth
ID17060306CL004_05	Lapwai Creek - Sweetwater Creek to mouth
ID17060305CL006_03	Stockney Creek - source to mouth
ID17060306CL008_03	Lapwai Creek - Winchester Lake to Sweetwater Creek
ID17060306CL008_04	Lapwai Creek - Winchester Lake to Sweetwater Creek
ID17060306CL009_03	Lapwai Lake
ID17060306CL010_02	Lapwai Creek - source to Winchester Lake
ID17060305CL003_02	Cottonwood Creek - source to Cottonwood Creek waterfall
ID17060305CL003_04	Cottonwood Creek - source to Cottonwood Creek waterfall
ID17060306CL020_02	Long Hollow Creek - source to mouth
ID17060306CL019_03	Holes Creek - source to mouth
ID17060305CL012_05	South Fork Clearwater River - Johns Creek to Butcher Creek
ID17060103SL016_02	Tammany Creek - source to unnamed tributary (T34N, R04W, Sec. 19)
ID17060304CL011_03	Maggie Creek - source to mouth
ID17060305CL081_03	Sally Ann Creek - Wall Creek to mouth
ID17060305CL082_02	Rabbit Creek - source to mouth
ID17060306CL010_03	Lapwai Creek - source to Winchester Lake
ID17060306CL011_02	Mission Creek - source to mouth
ID17060306CL011_03	Mission Creek - source to mouth
ID17060306CL012_02	Tom Beall Creek - source to mouth
ID17060306CL012_03	Tom Beall Creek - source to mouth
ID17060306CL013_02	Clearwater River - North Fork Clearwater River to mouth
ID17060306CL013_03	Clearwater River - North Fork Clearwater River to mouth
ID17060306CL013_07	Clearwater River - North Fork Clearwater River to mouth
ID17060306CL014_02	Cottonwood Creek - source to mouth
ID17060306CL014_03	Cottonwood Creek - source to mouth
ID17060306CL015_02	Jacks Creek - source to mouth
ID17060306CL020_03	Long Hollow Creek - source to mouth
ID17060306CL021_02	Clearwater River - Lolo Creek to North Fork Clearwater River
ID17060306CL021_06	Clearwater River - Lolo Creek to North Fork Clearwater River
ID17060306CL022_02	Clearwater River - confluence of South and Middle Fork Clear
ID17060306CL022_03	Clearwater River - confluence of South and Middle Fork Clear
ID17060306CL022_06	Clearwater River - confluence of South and Middle Fork Clear
ID17060306CL023_02	Sixmile Creek - source to mouth
ID17060306CL023_03	Sixmile Creek - source to mouth

Nez Perce Tribe

Assessment Unit	Water Body Name
ID17060306CL024_02	Lawyer Creek - source to mouth
ID17060306CL024_03	Lawyer Creek - source to mouth
ID17060306CL024_04	Lawyer Creek - source to mouth
ID17060306CL025_02	Sevenmile Creek - source to mouth
ID17060306CL025_03	Sevenmile Creek - source to mouth
ID17060306CL026_02	Lolo Creek - Yakus Creek to mouth
ID17060306CL026_04	Lolo Creek - Yakus Creek to mouth
ID17060306CL034_04	Jim Ford Creek - waterfall (12.5 miles upstream) to mouth.

Appendix N. High Priority Waters Remaining from the 2002 Total Maximum Daily Load Settlement Agreement

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Assessment Unit	Water Body Name	U.S. Geological Survey Cataloging Unit Name	Pollutant
ID17010104PN004_02	Blue Joe Creek	Lower Kootenai	Cadmium
ID17010104PN004_02	Blue Joe Creek	Lower Kootenai	Lead
ID17010104PN004_02	Blue Joe Creek	Lower Kootenai	Zinc
ID17010214PN001_08	Priest River to Albeni Falls Dam	Pend Oreille Lake	Temperature (water)
ID17010214PN001_08	Priest River to Albeni Falls Dam	Pend Oreille Lake	Dissolved Gas Supersaturation
ID17010215PN012_02	Two Mouth Creek	Priest	Temperature (water)
ID17010215PN023_02	Reeder Creek	Priest	Temperature (water)
ID17010215PN023_03	Gold Cr (part of Reeder)	Priest	Temperature (water)
ID17010215PN024_03	Kalispell Creek	Priest	Temperature (water)
ID17010215PN026_02	Binarch Creek	Priest	Temperature (water)
ID17010215PN030_04	Lower West Branch Priest	Priest	Temperature (water)
ID17010215PN008_03	Solider	Priest	Temperature (water)
ID17010215PN013_02	Lion Creek	Priest	Temperature (water)
ID17010215PN019_02	Gold/Hughes	Priest	Temperature (water)
ID17010215PN022_04	Granite Creek	Priest	Temperature (water)
ID17010301PN004_04	Prichard Creek	Upper Coeur d'Alene	Temperature (water)
ID17010301PN028_03	Steamboat Creek	Upper Coeur d'Alene	Temperature (water)
ID17010301PN008_02	W Fk Eagle Ck	Upper Coeur d'Alene	Temperature (water)
ID17010303PN007_06	Coeur d'Alene River-Latour to mouth	Coeur d'Alene Lake	Sedimentation/Siltation
ID17010303PN015_02	Latour Creek	Coeur d'Alene Lake	Temperature (water)
ID17010303PN034_02	Fernan Creek	Coeur d'Alene Lake	Temperature (water)
ID17010303PN034_03	Fernan Creek	Coeur d'Alene Lake	Temperature (water)
ID17040209SK003_03	Marsh Creek	Lake Walcott	Temperature (water)
ID17040212SK010_03	Mud Creek	Upper Snake-Rock	Temperature (water)
ID17040212SK012_03	Cedar Draw	Upper Snake-Rock	Temperature (water)
ID17040212SK013_05	Rock Creek	Upper Snake-Rock	Temperature (water)
ID17040212SK014_02	Cottonwood Creek	Upper Snake-Rock	Temperature (water)
ID17040212SK015_02	McMullen Creek	Upper Snake-Rock	Temperature (water)
ID17040212SK015_03	McMullen Creek	Upper Snake-Rock	Temperature (water)
ID17040212SK020_07	Snake-Milner to T Falls	Upper Snake-Rock	Temperature (water)
ID17040212SK022_03	Dry Creek	Upper Snake-Rock	Temperature (water)
ID17040212SK034_04	Clover Creek	Upper Snake-Rock	Temperature (water)
ID17040212SK035_04	Pioneer Reservoir	Upper Snake-Rock	Temperature (water)
ID17040218SK002_06	Big Lost-Spring Ck to Sinks	Big Lost	Sedimentation/Siltation
ID17040218SK002_06	Big Lost-Spring CK to Sinks	Big Lost	Temperature (water)
ID17040218SK002_06	Big Lost-Spring Ck to Sinks	Big Lost	Cause Unknown
ID17040218SK013_05	Jones Ck to McKay Ck	Big Lost	Sedimentation/Siltation
ID17040218SK013_05	Jones Ck to McKay Ck	Big Lost	Cause Unknown
ID17040218SK015_05	1000 Spring to Jones Ck	Big Lost	Sedimentation/Siltation
ID17040218SK015_05	1000 Spring to Jones Ck	Big Lost	Cause Unknown
ID17040218SK024_05	Burnt Ck to 1000 Spring	Big Lost	Sedimentation/Siltation
ID17040218SK024_05	Burnt Ck to 1000 Spring	Big Lost	Cause Unknown
ID17040219SK028_02	Rock Creek	Big Wood	Temperature (water)
ID17050101SW003_03	Browns	C.J. Strike Reservoir	Sedimentation/Siltation

Assessment Unit	Water Body Name	U.S. Geological Survey Cataloging Unit Name	Pollutant
ID17050101SW006_02	Sailor	C.J. Strike Reservoir	Sedimentation/Siltation
ID17050101SW006_03	Sailor	C.J. Strike Reservoir	Sedimentation/Siltation
ID17050101SW008_02	Deadman	C.J. Strike Reservoir	Sedimentation/Siltation
ID17050102SW009_06	Bruneau	Bruneau	Temperature (water)
ID17050102SW011_06	Bruneau	Bruneau	Temperature (water)
ID17050102SW013_05	Bruneau	Bruneau	Temperature (water)
ID17050102SW013_06	Bruneau	Bruneau	Temperature (water)
ID17050102SW020_05	Bruneau	Bruneau	Temperature (water)
ID17050102SW028_04	Clover Creek-E Fork Bruneau	Bruneau	Temperature (water)
ID17050102SW028_05	Clover Creek-E Fork Bruneau	Bruneau	Temperature (water)
ID17050102SW002_02	Jacks Creek	Bruneau	Temperature (water)
ID17050102SW002_03	Jacks Creek	Bruneau	Temperature (water)
ID17050102SW002_04	Jacks Creek	Bruneau	Temperature (water)
ID17050102SW002_05	Jacks Creek	Bruneau	Temperature (water)
ID17050103SW004_02	McBride	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW004_02	McBride	Middle Snake-Succor	Temperature (water)
ID17050103SW004_03	McBride	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW004_03	McBride	Middle Snake-Succor	Temperature (water)
ID17050103SW016_02	Pickett	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW016_02	Pickett	Middle Snake-Succor	Temperature (water)
ID17050103SW016_03	Pickett	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW019_02	Brown	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW019_03	Brown	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW019_04	Brown	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW021_02	Birch	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW021_03	Birch	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW021_04	Birch	Middle Snake-Succor	Sedimentation/Siltation
ID17050103SW008_02	Hardtrigger	Middle Snake-Succor	Combined Biota/Habitat Bioassessments
ID17050114SW001_06	Boise River-Indian Ck to mouth	Lower Boise	Temperature (water)
ID17050114SW001_06	Boise River-Indian Ck to mouth	Lower Boise	Cause Unknown (total phosphorus)
ID17050114SW002_04	Indian Ck at Nampa	Lower Boise	Temperature (water)
ID17050114SW002_04	Indian Ck at Nampa	Lower Boise	Fecal Coliform
ID17050114SW005_06	Boise River-Eagle Island to Indian	Lower Boise	Temperature (water)
ID17050114SW005_06	Boise River-Eagle Island to Indian	Lower Boise	Total Phosphorus
ID17050114SW006_02	Mason Creek	Lower Boise	Sedimentation/Siltation
ID17050114SW010_03	Five Mile Creek	Lower Boise	Sedimentation/Siltation
ID17050114SW011a_06	Boise River-Diversion Dam to Eagle Island	Lower Boise	Temperature (water)
ID17050114SW016_03	Sand Hollow Ck	Lower Boise	Sedimentation/Siltation
ID17050114SW016_03	Sand Hollow Ck	Lower Boise	Cause Unknown
ID17050114SW017_03	Sand Hollow Ck	Lower Boise	Sedimentation/Siltation
ID17050114SW017_06	Sand Hollow Ck	Lower Boise	Sedimentation/Siltation
ID17050114SW008_03	Ten Mile Ck	Lower Boise	Sedimentation/Siltation
ID17050114SW008_03	Ten Mile Ck	Lower Boise	Fecal Coliform

Assessment Unit	Water Body Name	U.S. Geological Survey Cataloging Unit Name	Pollutant
ID17050114SW009_02	Blacks Creek	Lower Boise	Combined Biota/Habitat Bioassessments
ID17050114SW009_03	Blacks Creek	Lower Boise	Combined Biota/Habitat Bioassessments
ID17050114SW012_02	Stewart, Cottonwood	Lower Boise	Combined Biota/Habitat Bioassessments
ID17050114SW012_03	Stewart, Cottonwood	Lower Boise	Combined Biota/Habitat Bioassessments
ID17050114SW015_02	Willow Creek (nr Pearl)	Lower Boise	Combined Biota/Habitat Bioassessments
ID17050114SW015_02	Willow Creek (nr Pearl)	Lower Boise	Temperature (water)
ID17050120SW001_05	S Fork Payette	South Fork Payette	Sedimentation/Siltation
ID17050122SW001_06	Black Can Dam to mouth	Payette	Temperature (water)
ID17050201SW003_08	Snake River	Brownlee Reservoir	Mercury
ID17060201SL015_03	Garden Creek	Upper Salmon	Sedimentation/Siltation
ID17060201SL015_03	Garden Creek	Upper Salmon	Cause Unknown
ID17060201SL015_04	Garden Creek	Upper Salmon	Sedimentation/Siltation
ID17060201SL015_04	Garden Creek	Upper Salmon	Cause Unknown
ID17060201SL027_05	Salmon River	Upper Salmon	Sedimentation/Siltation
ID17060201SL027_05	Salmon River	Upper Salmon	Temperature (water)
ID17060201SL047_05	Salmon River	Upper Salmon	Sedimentation/Siltation
ID17060201SL047_05	Salmon River	Upper Salmon	Temperature (water)
ID17060201SL063_05	Salmon River	Upper Salmon	Sedimentation/Siltation
ID17060201SL063_05	Salmon River	Upper Salmon	Temperature (water)
ID17060201SL072_05	Salmon River	Upper Salmon	Sedimentation/Siltation
ID17060201SL132_04	Warm Springs Creek	Upper Salmon	Sedimentation/Siltation
ID17060201SL132_02	Warm Springs Creek	Upper Salmon	Sedimentation/Siltation
ID17060201SL132_03	Warm Springs Creek	Upper Salmon	Sedimentation/Siltation
ID17060201SL132_04	Warm Springs Creek	Upper Salmon	Sedimentation/Siltation
ID17060201SL133_02	Broken Wagon Creek	Upper Salmon	Sedimentation/Siltation
ID17060201SL133_03	Broken Wagon Creek	Upper Salmon	Sedimentation/Siltation
ID17060203SL005_03	Big Deer Creek	Middle Salmon-Panther	Copper
ID17060203SL011_04	Panther Creek	Middle Salmon-Panther	Copper
ID17060204SL001_06	Lemhi-Kenney to Mouth	Lemhi	Temperature (water)
ID17060204SL005_06	Lemhi-Hayden to Kenney	Lemhi	Temperature (water)
ID17060204SL024_05	Lemhi-Peterson to Hayden	Lemhi	Temperature (water)
ID17060204SL025_05	Confluence of Big & Little Eightmile	Lemhi	Temperature (water)
ID17060204SL026a_02	Ferry Creek	Lemhi	Sedimentation/Siltation
ID17060204SL026a_02	Ferry Creek	Lemhi	Cause Unknown
ID17060204SL030_04	4th Order Big Creek	Lemhi	Temperature (water)
ID17060204SL030_05	Source to Little Eightmile	Lemhi	Temperature (water)
ID17060204SL050a_03	Hawley Creek	Lemhi	Cause Unknown (temp)
ID17060204SL063_02	Wimpey Creek	Lemhi	Temperature (water)
ID17060204SL066a_03	Kirtley Creek	Lemhi	Temperature (water)
ID17060204SL066b_02	Kirtley Creek	Lemhi	Temperature (water)

Assessment Unit	Water Body Name	U.S. Geological Survey Cataloging Unit Name	Pollutant
ID17060303CL010_02	Boulder Creek	Lochsa	Temperature (water)
ID17060303CL010_04	Boulder Creek	Lochsa	Temperature (water)
ID17060303CL032_03	Storm Creek	Lochsa	Temperature (water)
ID17060303CL052_02	Fish Creek	Lochsa	Temperature (water)
ID17060303CL052_03	Fish Creek	Lochsa	Temperature (water)
ID17060303CL052_04	Fish Creek	Lochsa	Temperature (water)
ID17060303CL057_02	Fish Creek	Lochsa	Temperature (water)
ID17060303CL057_03	Fish Creek	Lochsa	Temperature (water)
ID17060303CL063_02	Pete King Creek	Lochsa	Temperature (water)
ID17060303CL063_03	Pete King Creek	Lochsa	Temperature (water)
ID17060303CL064_02	Walde Creek	Lochsa	Temperature (water)
ID17060306CL002_07	Clearwater-Potlatch River to Lower Granite Pool	Clearwater	Dissolved Gas Supersaturation
ID17060306CL006_03	Sweetwater Creek	Clearwater	Sedimentation/Siltation
ID17060306CL006_03	Sweetwater Creek	Clearwater	Temperature (water)
ID17060306CL006_03	Sweetwater Creek	Clearwater	Cause Unknown
ID17060306CL006_03	Sweetwater Creek	Clearwater	Fecal Coliform
ID17060306CL006_04	Sweetwater Creek	Clearwater	Sedimentation/Siltation
ID17060306CL006_04	Sweetwater Creek	Clearwater	Temperature (water)
ID17060306CL006_04	Sweetwater Creek	Clearwater	Cause Unknown
ID17060306CL006_04	Sweetwater Creek	Clearwater	Fecal Coliform
ID17060306CL007_02	Webb Creek	Clearwater	Sedimentation/Siltation
ID17060306CL007_02	Webb Creek	Clearwater	Temperature (water)
ID17060306CL007_02	Webb Creek	Clearwater	Cause Unknown
ID17060306CL007_02	Webb Creek	Clearwater	Fecal Coliform
ID17060306CL013_07	Clearwater-NF to mouth	Clearwater	Dissolved Gas Supersaturation
ID17060306CL019_02	Holes Creek	Clearwater	Ammonia (un-ionized)
ID17060306CL019_02	Holes Creek	Clearwater	Oil and Grease
ID17060306CL019_02	Holes Creek	Clearwater	Sedimentation/Siltation
ID17060306CL019_02	Holes Creek	Clearwater	Cause Unknown
ID17060306CL020_03	Long Hollow Creek	Clearwater	Sedimentation/Siltation
ID17060306CL020_03	Long Hollow Creek	Clearwater	Cause Unknown
ID17060306CL020_03	Long Hollow Creek	Clearwater	Fecal Coliform
ID17060306CL023_02	Sixmile Creek	Clearwater	Ammonia (un-ionized)
ID17060306CL023_02	Sixmile Creek	Clearwater	Oil and Grease
ID17060306CL023_02	Sixmile Creek	Clearwater	Sedimentation/Siltation
ID17060306CL023_02	Sixmile Creek	Clearwater	Temperature (water)
ID17060306CL023_02	Sixmile Creek	Clearwater	Cause Unknown
ID17060306CL023_03	Sixmile Creek	Clearwater	Ammonia (un-ionized)
ID17060306CL023_03	Sixmile Creek	Clearwater	Oil and Grease
ID17060306CL023_03	Sixmile Creek	Clearwater	Sedimentation/Siltation
ID17060306CL023_03	Sixmile Creek	Clearwater	Temperature (water)
ID17060306CL023_03	Sixmile Creek	Clearwater	Cause Unknown
ID17060306CL024_02	Lawyer Creek	Clearwater	Ammonia (un-ionized)
ID17060306CL024_02	Lawyer Creek	Clearwater	Oil and Grease
ID17060306CL024_02	Lawyer Creek	Clearwater	Sedimentation/Siltation
ID17060306CL024_02	Lawyer Creek	Clearwater	Temperature (water)
ID17060306CL024_02	Lawyer Creek	Clearwater	Cause Unknown
ID17060306CL024_02	Lawyer Creek	Clearwater	Fecal Coliform

Assessment Unit	Water Body Name	U.S. Geological Survey Cataloging Unit Name	Pollutant
ID17060306CL024_03	Lawyer Creek	Clearwater	Ammonia (un-ionized)
ID17060306CL024_03	Lawyer Creek	Clearwater	Oil and Grease
ID17060306CL024_03	Lawyer Creek	Clearwater	Sedimentation/Siltation
ID17060306CL024_03	Lawyer Creek	Clearwater	Temperature (water)
ID17060306CL024_03	Lawyer Creek	Clearwater	Cause Unknown
ID17060306CL025_02	Sevenmile Creek	Clearwater	Sedimentation/Siltation
ID17060306CL025_03	Sevenmile Creek	Clearwater	Sedimentation/Siltation
ID17060306CL031_02	Jim Brown Creek	Clearwater	Sedimentation/Siltation
ID17060306CL031_02	Jim Brown Creek	Clearwater	Temperature (water)
ID17060306CL031_02	Jim Brown Creek	Clearwater	Nutrient/Eutrophication Biological Indicators
ID17060306CL031_02	Jim Brown Creek	Clearwater	Escherichia Coli
ID17060306CL031_03	Jim Brown Creek	Clearwater	Sedimentation/Siltation
ID17060306CL031_03	Jim Brown Creek	Clearwater	Temperature (water)
ID17060306CL031_03	Jim Brown Creek	Clearwater	Cause Unknown
ID17060306CL031_03	Jim Brown Creek	Clearwater	Fecal Coliform
ID17060306CL041_02	Bedrock Creek	Clearwater	Ammonia (un-ionized)
ID17060306CL041_02	Bedrock Creek	Clearwater	Oil and Grease
ID17060306CL041_02	Bedrock Creek	Clearwater	Sedimentation/Siltation
ID17060306CL041_02	Bedrock Creek	Clearwater	Temperature (water)
ID17060306CL041_02	Bedrock Creek	Clearwater	Cause Unknown
ID17060306CL041_02	Bedrock Creek	Clearwater	Fecal Coliform
ID17060306CL043_02	Pine Creek	Clearwater	Sedimentation/Siltation
ID17060306CL043_02	Pine Creek	Clearwater	Temperature (water)
ID17060306CL043_02	Pine Creek	Clearwater	Cause Unknown
ID17060306CL043_03	Pine Creek	Clearwater	Ammonia (un-ionized)
ID17060306CL043_03	Pine Creek	Clearwater	Oil and Grease
ID17060306CL043_03	Pine Creek	Clearwater	Sedimentation/Siltation
ID17060306CL043_03	Pine Creek	Clearwater	Cause Unknown
ID17060308CL001_06	North Fork Clearwater River	Lower North Fork Clearwater	Dissolved Gas Supersaturation

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Appendix O. §303(d) Priority Ranking by Hydrologic Unit Code and Year

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Year	Hydrologic Unit Code	U.S. Geological Survey Cataloging Unit Name	Priority
2011			
	17040209	Lake Walcott	High
	17040212	Mid-Snake/Upper Snake Rock	High
	17050102	Bruneau	High
	17050114	Lower Boise & Lake Lowell	High
	17050123	North Fork Payette/Cascade Lake	High
	17060103	Lower Snake/Asotin (Tammany Creek)	High
	17060204	Lemhi	High
	17060308	Lower North Fork Clearwater	High
	17060306	Clearwater (non-tribal)	High
	17010215	Priest	High
	17010301	North Fork Coeur d'Alene	High
	17010302	South Fork Coeur d'Alene	High
	17010305	Upper Spokane	High
2012			
	17010214	Pend Oreille Lake	High
	17010216	Pend Oreille River	High
	17010303	Coeur d'Alene Lake	High
	17010104	Lower Kootenai	High
	17040211	Goose Creek	High
	17040217	Little Lost	High
	17040218	Big Lost River	High
	17040221	Little Wood River	High
	17040219	Big Wood River	High
	17050103	Mid-Snake/Succor Creek	High
	17050101	C J Strike	High
	17050122	Lower Payette	High
	17040205	Willow	High
	17050201	Brownlee	High
	17050120	South Fork Payette	High
	17060201	Salmon River-Upper	High
	17060202	Pahsimeroi	High
	17060203	Mid-Salmon River/Panther Creek	High
	17060208	South Fork Salmon	High
	17060303	Lochsa River	High
	17060305	South Fork Clearwater	High

Year	Hydrologic Unit Code	U.S. Geological Survey Cataloging Unit Name	Priority
2013			
	17040105	Salt	Medium
	16020309	Curlew Valley	Medium
	17010304	St Joe	Medium
	17040201	Idaho Falls	Medium
	17040104	Snake River-S Fork/Palisades	Medium
	17040210	Raft River	Medium
	17040216	Birch	Medium
	17040220	Camas Creek	Medium
	17050115	Mid-Snake /Payette	Medium
	17060101	Snake below Hells Canyon	Medium
	17050104	Upper Owyhee	Medium
	17050105	Owyhee River	Medium
	17050107	North Fork Owyhee	Medium
	17060108	Palouse	Medium
	17060304	Middle Fork Clearwater	Medium
	17060307	Upper North Fork Clearwater	Medium
2014			
	17010101	Upper Kootenai	Medium
	17010105	Moyie	Medium
	17010213	Lower Clark Fork	Medium
	17010306	Hangman	Medium
	17040204	Teton River	Medium
	17040205	Willow Creek	Medium
	17040215	Medicine Lodge	Medium
	17060207	Salmon River/Crooked Creek	Medium
2015			
	17040207	Blackfoot	Low
	16010102	Central Bear	Low
	16010201	Bear Lake	Low
	16010202	Middle Bear	Low
	16010203	Little Bear-Logan	Low
	16010204	Lower Bear-Malad	Low
	17040214	Beaver-Camas	Low
	17060205	Salmon River-Middle	Low
	17060206	Salmon River-Middle	Low
	17060209	Lower Salmon	Low
	17060210	Little Salmon	Low

Year	Hydrologic Unit Code	U.S. Geological Survey Cataloging Unit Name	Priority
	17060301	Upper Selway River	Low
	17060302	Selway River	Low
	17040213	Salmon Falls Creek	Low
	17050112	Boise-Mores Creek	Low
	17040206	American Falls	Low
	17040202	Henry's Lake	Low
	17040203	Henry's Fork	Low
	17050111	Middle Fork Boise	Low
	17050113	South Fork Boise	Low
	17050108	Jordan Creek	Low
	17040208	Portneuf	Low
	17050124	Weiser	Low

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Appendix P. Map of Mercury-Impaired Water Bodies

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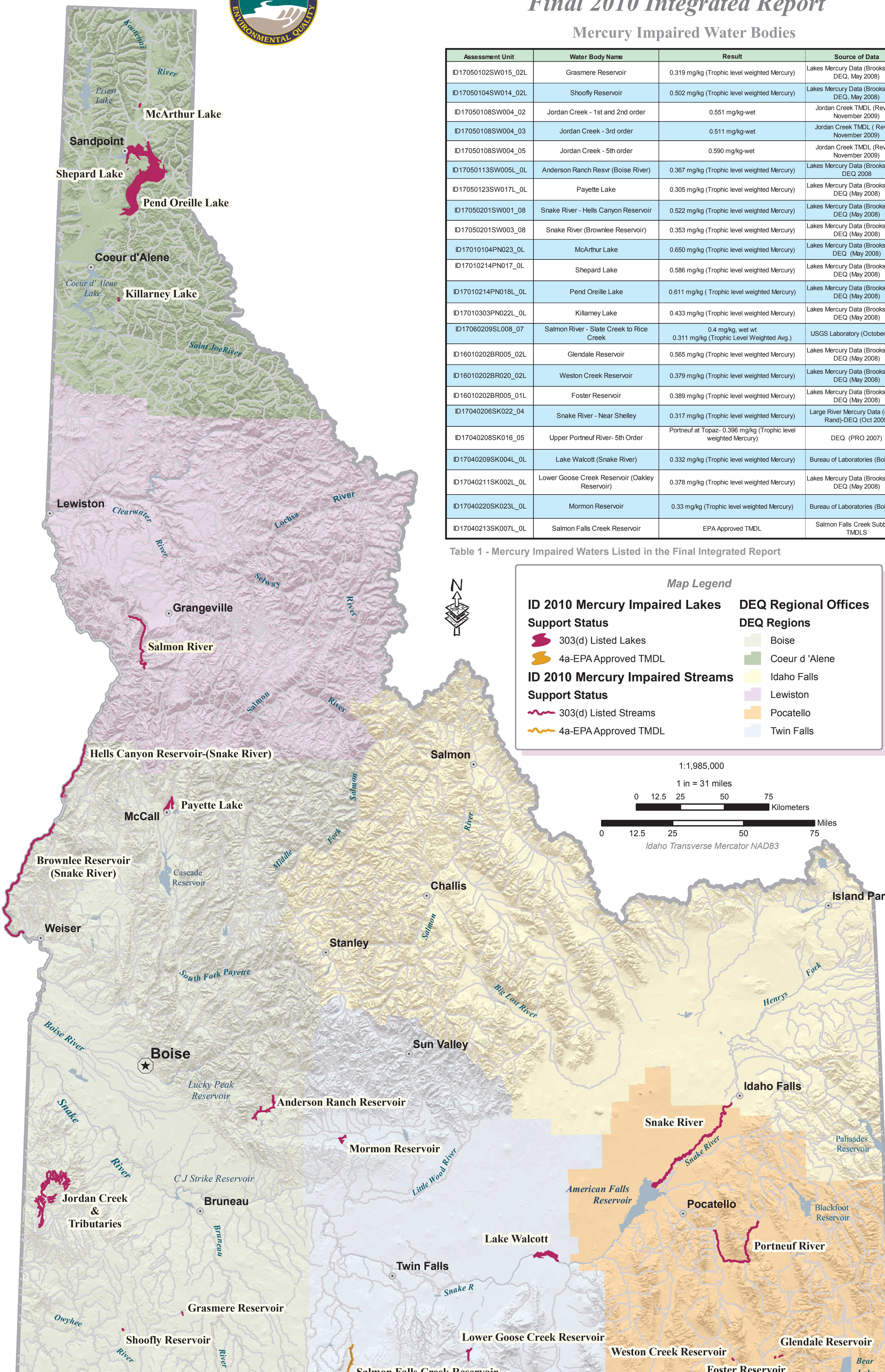
Idaho Department of Environmental Quality

Final 2010 Integrated Report

Mercury Impaired Water Bodies

Assessment Unit	Water Body Name	Result	Source of Data
ID17050102SW015_02L	Grasmere Reservoir	0.319 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ, May 2008)
ID17050104SW014_02L	Shoofly Reservoir	0.502 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ, May 2008)
ID17050108SW004_02	Jordan Creek - 1st and 2nd order	0.551 mg/kg-wet	Jordan Creek TMDL (Revised November 2009)
ID17050108SW004_03	Jordan Creek - 3rd order	0.511 mg/kg-wet	Jordan Creek TMDL (Revised November 2009)
ID17050108SW004_05	Jordan Creek - 5th order	0.590 mg/kg-wet	Jordan Creek TMDL (Revised November 2009)
ID17050113SW005L_0L	Anderson Ranch Resvr (Boise River)	0.367 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ 2008
ID17050123SW017L_0L	Payette Lake	0.305 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17050201SW001_08	Snake River - Hells Canyon Reservoir	0.522 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17050201SW003_08	Snake River (Brownlee Reservoir)	0.353 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17010104PN023_0L	McArthur Lake	0.650 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17010214PN017_0L	Shepard Lake	0.586 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17010214PN018L_0L	Pend Oreille Lake	0.611 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17010303PN022L_0L	Killarney Lake	0.433 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17060209SL008_07	Salmon River - Slate Creek to Rice Creek	0.4 mg/kg, wet wt 0.311 mg/kg (Trophic Level Weighted Avg.)	USGS Laboratory (October 2009)
ID16010202BR005_02L	Glendale Reservoir	0.565 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID16010202BR020_02L	Weston Creek Reservoir	0.379 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID16010202BR005_01L	Foster Reservoir	0.389 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17040206SK022_04	Snake River - Near Shelley	0.317 mg/kg (Trophic level weighted Mercury)	Large River Mercury Data (Brooks Rand)-DEQ (Oct 2009)
ID17040208SK016_05	Upper Portneuf River- 5th Order	Portneuf at Topaz- 0.396 mg/kg (Trophic level weighted Mercury)	DEQ (PRO 2007)
ID17040209SK004L_0L	Lake Walcott (Snake River)	0.332 mg/kg (Trophic level weighted Mercury)	Bureau of Laboratories (Boise, ID)
ID17040211SK002L_0L	Lower Goose Creek Reservoir (Oakley Reservoir)	0.378 mg/kg (Trophic level weighted Mercury)	Lakes Mercury Data (Brooks Rand)-DEQ (May 2008)
ID17040220SK023L_0L	Mormon Reservoir	0.33 mg/kg (Trophic level weighted Mercury)	Bureau of Laboratories (Boise, ID)
ID17040213SK007L_0L	Salmon Falls Creek Reservoir	EPA Approved TMDL	Salmon Falls Creek Subbasin TMDLS

Table 1 - Mercury Impaired Waters Listed in the Final Integrated Report



http://global.deq.idaho.gov/Website/wq2010

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Appendix Q. Response to Comments

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Idaho's 2010 Integrated Report: Response to Comments

State of Idaho
Department of Environmental Quality
1410 North Hilton
Boise, Idaho 83706

August 2011

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Introduction

DEQ conducted a 60-day public comment period on the draft Principles and Policies for the 2010 Integrated Report document and water body specific actions taken in Idaho's 2010 Integrated Report. DEQ received a total of 23-comment letters. Some comments were received after the close of the comment period yet were considered and included. The table below displays the list of people and organizations that submitted comments on the 2010 Integrated Report.

	Name(s)	Address/Affiliation	Submittal Date
1	Brian Hoelscher	*Idaho Power Company* bhoelscher@idahopower.com	September 9, 2009
2	Dan Dinning, David Anderson, Jennifer Porter	*Kootenai Valley Resource Initiative*	July 20, 2010 and November 22, 2010
3	Brenda Daily	*423 Lakeshore Drive, Sagle, ID 83860*	November 16, 2010
4	Jack Buell	*Benewah County Board of Commissioners*	November 22, 2010
5		*Lower Boise Watershed Advisory Group*	November 22, 2010
6	Sara Rupp	*Friends of the Teton River* sarah@tetonwater.org	November 23, 2010
7	Sara Cohn	*Idaho Conservation League*	November 23, 2010 and November 29, 2010
8	James DeRito	*Henry's Fork Foundation*	November 24, 2010
9	Henry Hamanishi	*J.R. Simplot Company*	November 24, 2010
10	Cynthia Mason	*P.O Box 179, Hope, ID 83836*	November 25, 2010
11		*Lake Pend Oreille Waterkeeper*	November 28, 2010
12	Kody Van Dyk	*City of Sandpoint Public Works Director* *kpvandyk@ci.sandpoint.id.us*	November 29, 2010
13	Ken Merrill	*Kalispel Tribe of Indians* *kmerrill@knrd.org*	November 29, 2010
14	Anna Trentadue	*Valley Advocates for Responsible Development*	November 29, 2010
15	Jack Lyman	Idaho Mining Association	November 29, 2010
16	Terry Harris	*Kootenai Environmental Alliance* kea@kealliance.org	November 29, 2010
17	David Croxton	*EPA Region 10 Watersheds Unit 1200 Sixth Ave., Suite 900, OWW-134 Seattle, WA 98101* Croxton.David@epamail.epa.gov	November 29, 2010
18	Kathy Rinaldi	*Teton County Commissioner* *krinaldi@co.teton.id.us*	November 29, 2010
19	Gregory Young	*Givens Pursley*	November 29, 2010
20	Bert Doughty	*Thompson Creek Mining Company*	November 30, 2010
21	Brian Liming	*MWH Americas, Inc.* Brian.D.Liming@us.mwhglobal.com	November 30, 2010

The following document includes DEQ's responses to individual comments regarding actions taken on the draft 2010 Integrated Report and incorporated in the final 2010 Integrated Report. Any comments that have no assessment unit identified are most likely comments relating to policy. Full references for citations found within the responses can be found in the references section following the final response. Attachment A provides additional information about the Pend Oreille River assessment units and is referenced in the applicable responses.

Responses to Individual Comments

Comment #1

Assessment Unit:	
Water Body:	Middle Snake River
Commenter:	Idaho Power Company
Comment:	Total phosphorus data suggests that there is no statistical decline of total phosphorus concentrations at King Hill since implementation of the Middle Snake River Watershed Management Plan. Additionally, aquatic vegetation indicates biomass to have increased throughout the river, dissolved oxygen is less than the minimum threshold criterion of 6.0 mg/L at Indian Cove, and daily average temperatures exceed the daily average criterion of 19°c during late summer in most years at Glenns Ferry.
Response:	Thank you for your comments. DEQ will be reviewing all existing and readily available data and information for the next 5-year review.

Comment #2

Assessment Units:	ID17050103SW024_04 ID17050103SW021_04 ID17050103SW012_04 ID17050103SW006_03 ID17050103SW014_05
Water Body:	Shoofly Creek Birch Creek Sinker Creek Snake River-3rd order unnamed tributaries near Sinker Creek Castle Creek
Commenter:	Idaho Power Company
Comment:	Data collected from drains and tributaries to C.J. Strike-Swan Falls Reach suggests that total phosphorus loads could be a substantial contributor to the Snake River total phosphorus loads and therefore should be considered for listing on the 2010 IR. Additionally, maximum temperatures among individual drains exceed Snake River maximum temperatures by about 8°C.
Response:	While some of the total phosphorus (TP) data are above other suggested reference values for TP and above the load allocation of 0.07 milligram/liter (mg/L) in both the *Snake River - Hells Canyon Total Maximum Daily Load (TMDL)* (DEQ and ODEQ 2004) and the *Mid Snake River/Succor Creek Subbasin Assessment and Total Maximum Daily Load* (DEQ 2003b), these data by themselves do not confirm an impairment to the beneficial uses in this section of the Snake River. Idaho has no numeric nutrient criteria; instead, the Idaho water quality standards include a narrative criterion for excess

	nutrients (IDAPA 58.01.02.200.06). The narrative criterion requires a site-specific analysis to determine the level of nutrients in a particular water body that "can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses." Values in relevant guidance documents and other literature should be used in evaluating whether nutrient levels are causing or could cause nuisance aquatic growth that impairs uses. However, levels that exceed guidance values alone do not equate to a violation of the narrative criterion. Instead, DEQ believes that all lines of evidence relating to impairment of uses must be reviewed to determine a violation of the narrative nutrient criterion. This evidence includes nitrogen and phosphorus levels but also may include other factors. When evaluating impairment of beneficial uses due to nutrients, other physical and chemical factors influence whether or not a nuisance algal growth may occur. Often pH, temperature, stream gradient (i.e., scouring), flow, and incident light radiation will play a significant role in whether a visible slime or nuisance algal growth occurs. Since this type of data was not part of your submittal, DEQ is not able to determine with any confidence the connection of nutrients, specifically TP, to impairments of the beneficial uses in these waters nor their impact on the Snake River at this location. Furthermore, DEQ appreciates Idaho Power providing temperature data collected on individual drains to the Snake River; however, more time is warranted to conduct a thorough analysis of the data. DEQ will review the temperature data for the 2012 Integrated Report. Therefore, DEQ will not be listing these waters in Category 5 for TP or temperature for the 2010 Integrated Report until further data can conclusively demonstrate an impairment to the beneficial uses due to excess TP and temperature.
Comment #3	
Assessment Unit:	ID17060101SL003_08
Water Body:	Snake River-Hells Canyon Dam to Sheep Creek
Commenter:	Idaho Power Company
Comment:	It is recommended that site specific temperature criteria be developed supportive of Snake River fall Chinook salmon.
Response:	DEQ will be undertaking rule making for site-specific temperature criteria for this section of the Snake River in 2011. The rule will have to be approved by the Board of Environmental Quality, the 2012 Idaho Legislature, and EPA before it becomes available for Clean Water Act purposes. The Oregon Department of Environmental Quality has also been petitioned by Idaho Power Company to begin rule making for the same salmonid spawning temperature criteria since Oregon shares this water body with Idaho.
Comment #4	
Assessment Unit:	ID17010104PN001_08
Water Body:	Kootenai River-Shorty's Island to the Idaho/Canadian Border
Commenter:	Kootenai Valley Resource Initiative

Comment:	The continued listing of the Kootenai River for temperature sets up the WAG in an impossible situation of TMDL development and implementation actions since PNV analysis is not applicable to large rivers such as the Kootenai River. Furthermore, elevated temperatures in the river are a result of water discharged from Libby Dam in Montana. Therefore, we recommend that more recent temperature data be collected and a more thorough analysis be performed to address impacts by temperature to the fish we are protecting.
Response:	Thank you for your comments. DEQ agrees that additional temperature monitoring and a more thorough analysis are warranted. DEQ will facilitate additional temperature monitoring as resources permit.
Comment #5	
Assessment Unit:	ID17010104PN036_03
Water Body:	Fleming Creek
Commenter:	Kootenai Valley Resource Initiative
Comment:	Fleming Creek is an unmonitored stream that is plagued with habitat alteration and flow alteration issues. It has a mill pond, is ditched, straightened, and is crossed multiple times by a county road. This assessment unit should be listed for habitat alteration and flow alteration.
Response:	DEQ agrees. These impairments have been added, and this assessment unit is now additionally displayed in Category 4c.
Comment #6	
Assessment Unit:	ID17010104PN023_02
Water Body:	McArthur Lake
Commenter:	Kootenai Valley Resource Initiative
Comment:	McArthur Lake has been added to Category 5 for mercury this reporting cycle. Since there are no known sources of mercury within the McArthur Lake watershed, it is impossible for the WAG to develop a TMDL that accurately allocates mercury loads. The WAG suggests DEQ investigate and develop a statewide TMDL for mercury in watersheds where there are no sources of mercury. Furthermore, will DEQ be following up with the Panhandle Health District to make sure a fish consumption advisory is developed?
Response:	The assessment unit referenced is not correct. The correct assessment unit for McArthur Lake is ID17010104PN023_0L. Developing total maximum daily loads (TMDLs) for mercury-impaired waters poses many technical and programmatic challenges, especially when the predominant mercury source is atmospheric deposition. DEQ does not have the resources currently to develop a statewide TMDL for mercury. The local health districts are not the entities that issue fish consumption advisories; it is the Idaho Fish Consumption Advisory Program (IFCAP) at the Idaho Department of Health and Welfare. IFCAP was made aware of DEQ's findings over two years ago. Furthermore, the only species obtained from McArthur Lake was large mouth bass, which are covered by a statewide fish advisory for bass.
Comment #7	
Assessment Unit:	ID17010104PN001_02
Water Body:	1st & 2nd order Tributaries to Kootenai River-Shorty Island-Idaho/British Columbia Border
Commenter:	Kootenai Valley Resource Initiative

Comment:	DEQ should add this assessment unit to Category 4c for low flow alteration and physical substrate habitat alterations and possibly Category 5 for sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list flow alteration, physical substrate habitat alterations, or sediment at this time. DEQ will continue evaluating the findings of this report.
Comment #8	
Assessment Unit:	ID17010104PN003_02
Water Body:	Grass Creek-Headwaters and Tributaries
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 4c for physical substrate habitat alterations and Category 5 for temperature and sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list physical substrate habitat alterations, temperature, or sediment at this time. DEQ will continue evaluating the findings of this report.
Comment #9	
Assessment Unit:	ID17010104PN009_03
Water Body:	Parker Creek-lower portion (Agricultural area)
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 4c for physical substrate habitat alterations and Category 5 for sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list physical substrate habitat alterations or sediment at this time. DEQ will continue evaluating the findings of this report.
Comment #10	
Assessment Unit:	ID17010104PN010_03a
Water Body:	Trout Creek-lower portion below branch
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 4c for physical substrate habitat alterations and Category 5 for sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list physical substrate habitat alterations or sediment at this time. DEQ will continue evaluating the findings of this report.

Comment #11	
Assessment Unit:	ID17010104PN011_02a
Water Body:	Ball Creek-lower portion-forest to Kootenai River
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 4c for physical substrate habitat alterations and Category 5 for sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list physical substrate habitat alterations or sediment at this time. DEQ will continue evaluating the findings of this report.

Comment #12	
Assessment Unit:	ID17010104PN024_03
Water Body:	Dodge Creek-south Fork Dodge Creek to McArthur Lake
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 4c for physical substrate habitat alterations and Category 5 for sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list physical substrate habitat alterations or sediment at this time. DEQ will continue evaluating the findings of this report.

Comment #13	
Assessment Unit:	ID17010104PN027_03
Water Body:	Brown Creek-confluence with Twentymile Creek to Deep Creek
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 4c for low flow alteration and physical substrate habitat alterations and Category 5 for sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list flow alteration, physical substrate habitat alterations, or sediment at this time. DEQ will continue evaluating the findings of this report.

Comment #14	
Assessment Unit:	ID17010104PN030_03
Water Body:	Lower Crow Creek-Cow Creek near Bonners Ferry
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 5 for sediment and temperature based on the findings reported in the Stressor Identification report developed for this reach. Furthermore, the description and computer file that represents Lower Cow Creek is not correct.

Response:	Thank you for your comments. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list sediment or temperature at this time. DEQ will continue evaluating the findings of this report. Any edits to the National Hydrography Dataset (NHD) need to be submitted to the Idaho Department of Water Resources for review and approval. If approved, the changes are submitted to the U.S. Geological Survey where the master copies are updated and distributed.
Comment #15	
Assessment Unit:	ID17010104PN039_02
Water Body:	Brush Creek
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 4c for low flow alteration and Category 5 for temperature based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list flow alteration or temperature at this time. DEQ will continue evaluating the findings of this report.
Comment #16	
Assessment Unit:	ID17010105PN012_02
Water Body:	Meadow Creek
Commenter:	Kootenai Valley Resource Initiative
Comment:	DEQ should add this assessment unit to Category 5 for sediment based on the findings reported in the Stressor Identification report developed for this reach.
Response:	Thank you for your comment. However, the Stressor Identification Report is only a preliminary report documenting DEQ's evaluation into identifying possible pollutants within the reach. DEQ does not intend to list sediment at this time. DEQ will continue evaluating the findings of this report.
Comment #17	
Assessment Unit:	ID17010104PN008_02
Water Body:	Long Canyon Creek-source to mouth
Commenter:	Kootenai Valley Resource Initiative
Comment:	This AU should be moved from Category 5 to Category 2. This creek has virtually no human impacts and has shown to be a "fully supporting" creek. While this creek may exceed numeric temperature criteria, it is likely due to natural conditions.

Response:	Long Canyon Creek has been placed in Category 5 because temperature measurements exceeded criteria in 2000 and 2001. Three temperature loggers (2001SCDATL0004, 2000SCDATL0017, and 2000SCDATL0018) were placed in the lower portion of Long Canyon Creek by DEQ. Long Canyon Creek is identified by EPA as a bull trout stream for which EPA bull trout criteria apply. Specific criteria exceedances are as follows: • 2001SCDATL0004 recorded temperatures in 2001 that exceeded EPA's bull trout criteria (10 ºC 7-day average of daily max) 84 of the 84 days (100%) the criteria were applicable and exceeded Idaho's salmonid spawning average (9 ºC) and instantaneous (13 ºC) criteria 42% and 85% of the days criteria were applicable, respectively. • 2000SCDATL0017 recorded temperatures in 2000 that exceeded EPA's bull trout criteria (10 ºC 7-day average of daily max) 84 of the 84 days (100%) the criteria were applicable. • 2000SCDATL0018 recorded temperatures in 2000 that exceeded EPA's bull trout criteria (10 ºC 7-day average of daily max) 84 of the 84 days (100%) the criteria were applicable. More recent temperature monitoring conducted by the Kootenai/Moyie watershed advisory group in 2009 and 2010 provisionally have similar exceedances of EPA's bull trout criteria.
Comment #18	
Assessment Unit:	ID17010104PN009_02
Water Body:	Parker Creek
Commenter:	Kootenai Valley Resource Initiative
Comment:	This AU should be moved from Category 3 to Category 2.
Response:	DEQ agrees. This assessment unit (AU) was erroneously removed from Category 2 and placed in Category 3. The Beneficial Use Reconnaissance Program data collected in 1994 demonstrates that this water body fully supports its assessed beneficial uses. Therefore, DEQ will move this AU back to Category 2.
Comment #19	
Assessment Unit:	
Water Body:	
Commenter:	Kootenai Valley Resource Initiative
Comment:	Several AUs have descriptions that need to be improved because they do not describe the AU or are duplicative. For example: Round Prairie Creek – Gillion Creek to mouth; McArthur Lake; Snow Creek; Dodge Creek; Upper Ball Creek; Lower Snow Creek.
Response:	The assessment unit descriptions will be improved in the Kootenai/Moyie subbasin as resources permit.
Comment #20	
Assessment Unit:	
Water Body:	
Commenter:	Kootenai Valley Resource Initiative

Comment:	The designation of Wilderness/Roadless waters should be clarified in the Principles and Policies document. It would be our suggestion that waters only be included in Category 1 if the entire watershed is devoid of roads or other human impacts.
Response:	DEQ feels our assumptions on wilderness are reasonable given the lack of human influence. DEQ waters that have been placed in Category 1 of the Integrated Report are those assessment units that fall entirely within a designated wilderness or inventoried roadless area. For roadless areas, DEQ used the two most restrictive categories, both of which prohibit road building. DEQ believes these waters meet the intent for establishing natural background conditions by virtue of the fact that there has been little to no significant human management to cause changes in water quality or affect beneficial uses. When Congress designates an area as wilderness, the main reason is because it meets the criteria of low human impact. DEQ solicits information that would indicate why any particular water should not be included in Category 1. These data need to demonstrate that human impacts are impairing water quality. In the absence of such data, DEQ will proceed with the presumption that wilderness and roadless area waters are unimpaired and place them in Category 1 of the Integrated Report. This policy is not applied to previously listed waters; thus, there are no delistings associated with this policy, and the policy only applies to waters that DEQ has not yet assessed ("no data" waters) or has assessed as fully supporting and within areas that fall under the roadless/wilderness definition.
Comment #21	
Assessment Unit:	
Water Body:	
Commenter:	Kootenai Valley Resource Initiative
Comment:	Regarding Appendix E of the Principles and Policies document, the Kootenai (17010104, 1701010) and Moyie subbassins (17010105) should be prioritized as whole units rather than at different times as proposed. Also, it is important that the regional offices work closely with the WAG/BAG to best develop priorities.
Response:	Thank you for your comments. However, DEQ does not plan to combine these hydrologic unit codes (HUCs) at this time. Combining makes sense in one way, but not in terms of resources and time. It takes a lot of time (and dollars) to complete monitoring, assessments, and TMDLs for a single HUC, let alone multiple HUCs. It would be years before we could complete the cycle for all these HUCs together. Lastly, watershed advisory groups are established because they have local knowledgeable about the HUC and thus provide more accurate input and gain ownership in the process. This would not necessarily be the case if we combined the HUCs as suggested.
Comment #22	
Assessment Unit:	
Water Body:	
Commenter:	Kootenai Valley Resource Initiative
Comment:	To create a more "user friendly" document, DEQ should consider creating chapters of the subbasins for all categories.

Response:	Thank you for your comment. DEQ will take your suggestion into consideration when developing the 2012 Integrated Report.
Comment #23	
Assessment Unit:	
Water Body:	Pend Oreille River
Commenter:	Brenda Daily
Comment:	This letter is to encourage you and our elected and appointed representatives to retain protection and oversight for the Pend Oreille River.
Response:	Thank you for your comment. Please refer to Attachment A for DEQ's rationale for delisting the Pend Oreille River for total phosphorus.
Comment #24	
Assessment Unit:	
Water Body:	
Commenter:	Benewah County Board of Commissioners
Comment:	We are skeptical about the standards that are being used in the evaluation of rivers and tributaries. We are lead to this conclusion by the fact that some tributaries that have no or very little activity by man in their watersheds are nonetheless found to be out of compliance with the standards. In our view, watersheds that are undisturbed by man must be within the natural ranger of variability and the standards should reflect that condition. The standards should be adjusted to conform to natural conditions, rather than to have unreal standards and expect natural conditions to somehow conform to the standards. Furthermore, we are concerned that these standards cast a darker light on all the streams, including those that have had considerable activity by man. The standards probably conclude that the conditions are worse than they really are, and that remedial measures are more stringent than they need be.
Response:	DEQ is aware that some streams, many in the case of temperature, exceed adopted numeric criteria in the absence of human activity. Years ago, Idaho adopted a natural conditions provision into its water quality standards that recognizes this, providing that when natural conditions exceed water quality criteria, those criteria do not apply and instead pollutant levels shall not exceed natural background conditions. We have found it difficult to apply this provision, in part because of limited agency resources, but more so because it is difficult to sort out human influence from natural conditions in all but undisturbed watersheds. Consequently, if there is any question about the cause of impairment, we are compelled to error on the side of water quality protection. Standards are re-examined periodically in a process called triennial review of water quality standards. We will consider your suggestion in Idaho's next triennial review. Any adjustment of the standards requires rulemaking, including approval by the Idaho legislature and ultimately by the U.S. Environmental Protection Agency. Any new standard must be scientifically based to be approved.

Comment #25	
Assessment Unit:	ID17050114SW003_04
Water Body:	Indian Creek and Sand Creeks-4th order above 11th Ave. in Nampa
Commenter:	Lower Boise Watershed Advisory Group
Comment:	Since there is a significant surface water break between Upper Indian Creek and New York Canal, we suggest New York Canal being an independent AU.
Response:	DEQ agrees and will create a split for the 2012 Integrated Report.

Comment #26	
Assessment Units:	ID17040204SK032_02 ID17040204SK028_03 ID17040204SK026_04 ID17040204SK020_04 ID17040204SK017_04
Water Body:	Teton River-Headwaters to Trail Creek and Trail Creek to Highway 33
Commenters:	Friends of the Teton River Idaho Conservation League Valley Advocates for Responsible Development Teton County Commissioner Givens Pursley
Comment:	The water quality in Teton Valley is an area of strong concern to residents, visitors, natural resource experts, and governmental agencies. Although the rapid rate of growth and development has slowed in the past few years, significant concerns remain about the effect on water quality of alterations to land use practices. Adverse changes on the upper Teton River have been observed over the last several decades including increased siltation, hydrologic alteration, elevated levels of nitrates and bacteria, and a sharp decline in the native Yellowstone Cutthroat trout population. In 1998, the U.S. Environmental Protection Agency ("EPA") designated the upper Teton River (headwaters to Highway 33) and many of its tributaries as not meeting water quality standards due to excessive nutrients, temperature and sedimentation under section 303(d) of the Federal Clean Water Act. A study conducted in 1999 by Idaho State University (*Minshall, 2001,Origin and Fate of Water Quality Factors Affecting the Ecological Integrity of the Teton River*) showed elevated nitrate levels in the upper Teton River as affecting the ecological integrity of the river system. Due to the above concerns, in 2001 FTR designed and implemented a water quality program for the upper Teton River watershed. Initially the program was funded by DEQ. Data was collected from 11 monitoring sites located throughout Teton Valley, Idaho four times per year. (*See* **Figure 1**, attached hereto, which depicts the location of all monitoring sites.) However, due to budgetary cuts within the State of Idaho, the funding originally allocated to the water quality program in Teton County, Idaho was discontinued. Since fiscal year 2009 FTR has solicited private funding to continue the water quality program in Teton County, Idaho on a reduced schedule, now collecting data from

the 11 monitoring sites only twice per year. This data is summarized and provided to DEQ and the public at large upon request.

Review of the data generated from the water quality program, collected over the past 10 years, incites serious concerns regarding dissolved Nitrogen concentrations in the Teton River. When the water quality program was first initiated, dissolved Nitrogen concentration (NO2 + NO3::N) data was collected at four locations within Teton Valley, Idaho. In 2006 testing was discontinued at one of the sites. Each of the four original test sites is located along the Teton River, depicted on Figure 1 as TR1, TR2, TR3, and TR4. Test site TR1 is located in the headwaters of the Teton River. Test site TR2, now discontinued, is located downstream of TR1 at the South Bates Bridge. Test site TR3 is located downstream of TR1 and TR2 at the Bates Bridge. Test site TR4 is located downstream of TR1, TR2, and TR3 at the Highway 33 Bridge. These test sites correspond generally with various Assessment Units utilized by DEQ, as set forth in the following table:

Water Quality Test Site	**River Segment**	**Correspondent DEQ Assessment Number**
TR1	Headwaters to Trail Creek Segment	ID17040204SK032_02 ID1 7040204SK028_03
TR2 and TR3	Trail Creek to Highway 33 Segment	ID17040204SK026_04 ID1 7040204SK020_04 ID1 7040204SK017_04
TR4	Highway 33 to Bitch Creek Segment	ID17040204SK016_04 ID1 7040204SK015_04 ID1 7040204SK014_04

Pursuant to the Teton River Subbasin Assessment and Total Maximum Daily Load (TMDL), issued by DEQ, dated January 10, 2003, target concentrations of dissolved Nitrogen, (NO2 + NO3::N), shall not exceed 0.3 mg/L. (See, http://www.deq.idaho.gov/water/ data_reports/su rface_water/tmd ls/teton_river/teton_river_part3. pdf, p. 78.) However, review of the relevant data as set forth in Table One, attached hereto, indicates that dissolved Nitrogen concentrations in the Teton River have continually exceeded the target not-to-exceed level of 0.3 mg/L.

As set forth in Table One, dissolved Nitrogen concentrations at sites TR1, TR2, and TR3 have exceeded the 0.3 mg/L standard at each and every testing event over the past ten years. Dissolved Nitrogen concentrations at test site TR4 have also exceeded the 0.3 mg/L standard, with the exception of testing on 6/2/2008 and 7/16/2008.

Review of the ten-year data indicates that dissolved Nitrogen concentrations in the main stem of the Teton River gradually decrease in the downstream direction (somewhat unusual), with highest average concentrations at the uppermost (TR1) site. Higher concentrations at TR1 are not surprising since it is located upstream of the confluence of the major tributaries draining the west slope of the Tetons, and the river upstream of the sampling site drains an area that includes a significant percentage of agricultural lands, many of which are fertilized.

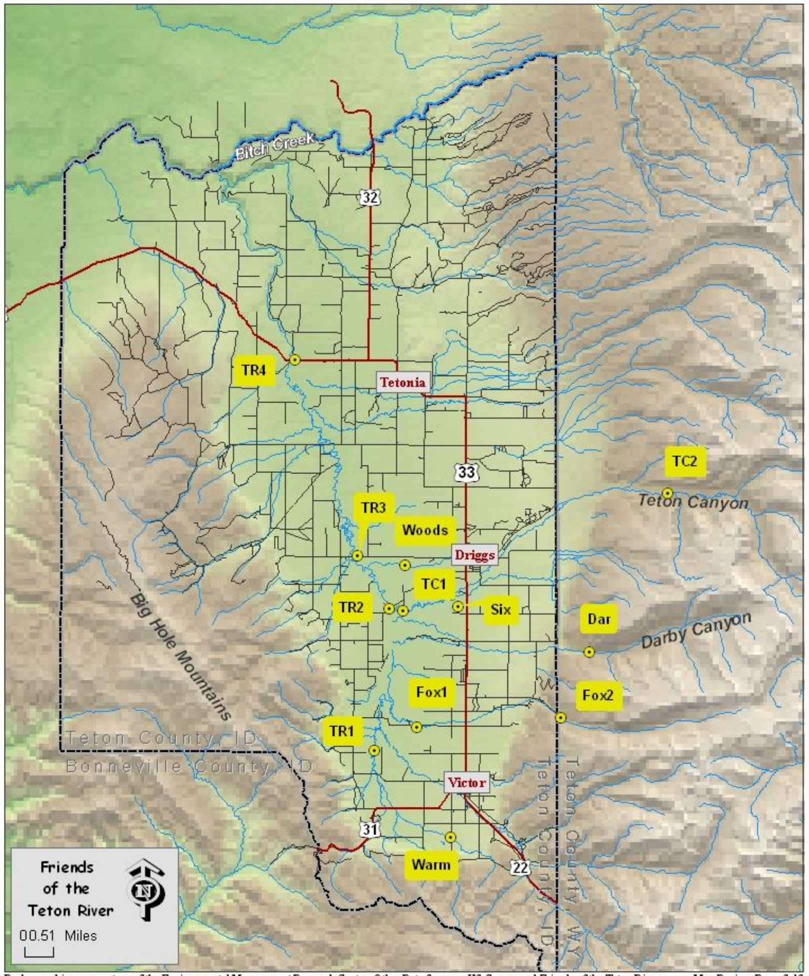
In addition to exceeding the target concentrations in the 2003 Teton River Subbasin Assessment and TMDL, FTR's dissolved nitrogen data collected at each monitoring location also exceeds the U.S. Environmental Protection Agency's (EPA) slightly less stringent ecoregion criteria levels. The EPA has separated the United States into various ecoregions and, for each ecoregion, has derived a set of criteria to represent surface water conditions that are minimally impacted by human activities and protective of aquatic life and recreational uses. In adopting these criteria, EPA's stated intent is to address cultural eutrophication and other adverse effects of excess nutrient inputs. As a whole, the ecoregion criteria are meant as guidance and a starting point for states and tribes to develop (with assistance from EPA) more refined nutrient criteria.

The Upper Teton River Basin is located in EPA's Ecroregion III, which is also known as the Xeric West ecoregion. The ecoregion criteria for the Xeric West region offers suggested standards for total phosphorus, total nitrogen, chlorophyll-a, and turbidity for rivers and streams in the region.

EPA has included a recommendation of 0.38 mg/L as a minimum Total Nitrogen concentration for the Xeric West. Again, a review of the FTR's monitoring data for dissolved nitrogen concentrations since 2001 show levels in the three segments comprising the Upper Teton River Basin well beyond the suggested ecoregion criteria.

While it is clear that dissolved Nitrogen concentrations in all three segments – Headwaters to Trail Creek, Trail Creek to Highway 33, and Highway 33 to Bitch Creek – have annually exceeded the 0.3 mg/L standard, the Draft 2010 Integrated Water Quality Report does not reflect this information. It is critical that all three segments be listed for nutrients, based upon the dissolved Nitrogen concentration data discussed above. Further, a water quality improvement plan, or TMDL, must be established for each segment to ensure that dissolved Nitrogen concentrations are reduced below the 0.3 mg/L standard. Specifically, the Draft 2010 Integrated Water Quality Report must be revised to incorporate the following three segments of the Teton River – Headwaters to Trail Creek, Trail Creek to Highway 33, and Highway 33 to Bitch Creek – into the Category 5 list which inventories those water bodies in the State of Idaho that do not meet applicable water quality standards and for which a TMDL must be established.

Figure 1. FTR's Water Quality Monitoring Stations in the Teton Basin



Background image courtesy of the Environmental Management Research Center. Other Data Sources: US Census and Friends of the Teton River. Map Design: Doug Self

Table One: Teton River Dissolved Nitrogen Concentration ($NO_2 + NO_3$ :: N) in [mg/L] or PPM				
Collection Date dd/mm/yyyy	*TR1: Headwaters*	*TR2: South Bates Bridge*	*TR3: Bates Bridge*	*TR 4: HWY 33 Bridge*
5/1/2001	1.40	1.28	1.11	1.14
6/1/2001	1.90	1.31	1.27	0.98
7/1/2001	1.78	1.29	1.18	1.02
8/1/2001	1.84	1.43	1.30	--
12/1/2001	--	1.80	1.70	1.70
3/2/2002	1.77	1.40	1.36	--
4/2/2002	2.08	1.57	1.48	1.25
5/2/2002	1.80	0.98	1.06	0.83
8/2/2002	2.10	1.65	1.53	1.27
5/3/2003	1.38	1.33	1.28	1.13
6/1/2003	1.76	1.10	1.08	0.85
7/1/2003	1.99	1.43	1.39	1.04
8/18/2003	1.96	1.49	1.40	1.23
9/15/2003	2.39	1.68	1.57	1.94
12/1/2003	1.86	1.71	1.63	--
4/4/2004	1.55	1.51	1.44	1.32
5/4/2004	1.78	1.55	1.46	1.25
6/4/2004	2.07	1.40	1.38	1.23
7/4/2004	2.17	1.70	1.55	1.26
8/4/2004	2.07	1.33	1.48	1.36
9/4/2004	1.34	1.19	1.09	0.93

4/5/2005	*0.98*	*0.96*	*0.91*	*0.85*
5/5/2005	*0.96*	*0.52*	*0.63*	*0.51*
7/5/2005	*1.38*	*0.81*	*0.89*	*0.63*
8/5/2005	*1.52*	*0.85*	*0.92*	*0.80*
10/5/2005	*1.31*	*1.15*	*1.04*	*0.91*
12/5/2005	*1.69*	*1.58*	*1.39*	*1.36*
4/6/2006	*0.93*	--	*0.92*	*0.87*
6/6/2006	*1.57*	--	*0.77*	*0.63*
8/6/2006	*1.45*	--	*0.97*	*0.72*
10/6/2006	*1.31*	--	*0.91*	*0.74*
6/8/2007	*1.50*	--	*0.71*	*0.57*
7/7/2007	*1.69*	--	*0.93*	*0.64*
8/7/2007	*1.57*	--	*0.89*	*0.60*
10/1/2007	*1.26*	--	*0.88*	*0.70*
6/2/2008	*0.85*	--	*0.44*	*0.14*
7/16/2008	*1.61*	--	*0.53*	*0.25*
8/6/2008	*1.59*	--	*0.96*	*0.69*
9/24/2008	*1.34*	--	*0.85*	*0.68*
7/29/2009	*1.26*	--	*0.92*	*0.70*
11/4/2009	*1.35*		*0.99*	*0.91*
7/20/2010	*1.37*		*1.01*	*0.59*
9/15/2010	*1.44*		*1.08*	*0.83*

* All collection dates are listed, if a particular sample was not take at a site on the given date it is denoted as (--). Note that the second collection site (TR2) was permanently discontinued as of 2006.

Response: DEQ appreciates the comments provided by Friends of the Teton River, Mr. Gregory Young (represented by Givens Pursley, LLP), Kathy Rinaldi (Teton County Commissioner), the Idaho Conservation League, and Anna Trentadue (Valley Advocates for Responsible Development). As most of the comments were in support of those submitted by Friends of the Teton River (FTR), this response will address those comments first.

FTR suggests that, based on data regarding nitrate/nitrite levels, DEQ should list all the assessment units (AUs) in the Teton Valley reach of the Teton River in Category 5 of the Integrated Report because of excess nutrients. FTR and Mr. Young compare the nitrate/nitrite levels to the target for nitrates set in the 2003 *Teton River Subbasin Assessment and Total Maximum Daily Load* (DEQ 2003c) and recommended levels set forth in the U.S. Environmental Protection Agency's (EPA's) Ecoregion guidance. While DEQ agrees that values in appropriate guidance and targets set for similar waters may be used to evaluate whether there are excess nutrients, guidance recommendations or targets in total maximum daily loads (TMDLs) are not state numeric criteria where a violation would mandate listing a water body on the §303(d) list. DEQ recognizes that the nitrate/nitrite data submitted by FTR may demonstrate excess nutrients in the upper reaches of the Teton River and further examination may be warranted, but the data alone do not demonstrate that excess nutrients are having a measureable adverse effect on beneficial uses. The fact that the upper reaches are currently listed as impaired waters due to physical substrate habitat alterations and/or sediment makes identifying the cause of the impairment that much more difficult.

Moreover, DEQ does not agree with the use of the recommended reference values in EPA's *Ambient Water Quality Criteria Recommendations: Rivers and Streams in Nutrient Ecoregion III* (EPA 2000). These recommended reference values have come under significant criticism from several sources due to the approach used when developing these recommendations (Anders and Ashley 2007; Hall and Hall 2009; Herlihy and Sifneos 2008; Lackey 2003; Smith and Tran 2010; Stevenson et al., in press; Stockner et al. 2000). The recommended ecoregional values are based on a frequency distribution approach of overall populations and do not show any relation to any degree of aquatic life or recreational use impairment. In short, DEQ believes the ecoregional recommendations are a poor gauge for determining whether the Idaho narrative nutrient criterion, which is linked to impairment of uses, is violated.

Idaho has no numeric nutrient criteria; instead, the Idaho water quality standards include a narrative criterion for excess nutrients. The narrative criterion requires a site-specific analysis to determine the level of nutrients in a particular water body that "can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses" (IDAPA 58.01.02.200.06). Values in relevant guidance documents and other literature should be used in evaluating whether nutrient levels are causing or can cause nuisance aquatic growth that impairs uses. However, levels that exceed guidance values alone do not equate to a violation of the narrative criterion. Instead, DEQ believes that all lines of evidence relating to impairment of uses must be reviewed to determine a violation of the narrative nutrient criterion. This evidence includes nitrogen and phosphorus levels but also may include other factors. When evaluating impairment of beneficial uses due to nutrients, other physical and chemical factors influence whether or not a nuisance algal growth may occur. Often pH, temperature, stream gradient (i.e., scouring), flow, and incident light radiation will play a significant role in whether a visible slime or nuisance algal growth occurs. DEQ is working on developing a method for evaluating water bodies that may potentially be impaired by excess nutrients. DEQ hopes with the development of this methodology that sufficient data will be collected to assist in determining if beneficial uses are being impaired by excess nutrients.

The approach to determining a violation of a narrative criterion outlined above is consistent with DEQ's *Water Body Assessment Guidance* document (Grafe et al. 2002). According to the assessment process laid out in the *Water Body Assessment Guidance*, in the absence of numeric criteria an assessor must use *substantiated* best professional judgment to determine if a violation is occurring. The rationale he or she must provide when making this determination is to consider the source of pollution (i.e., anthropogenic cause), a pathway, and a measurable adverse effect on a beneficial use. Without evidence of a measurable adverse effect on a beneficial use it is unlikely that a determination of impairment due to nutrients would be made. In other words, DEQ's assessment process, using Beneficial Use Reconnaissance Program generated information, is in the first instance aimed at determining whether an impairment of uses exists and then determining the cause of that impairment. Linking impairment to excess nutrients requires a review of a number of sources of information.

As indicated above, nitrate levels alone do not show an impairment of either aquatic life or recreational uses. Other lines of evidence were reviewed in the *Teton River Subbasin Assessment and Total Maximum Daily Load* (DEQ 2003c). DEQ reviewed total phosphorus data, which were consistently below the EPA Gold Book value of 0.1 milligrams/liter total phosphorus. The bioassessment work completed by DEQ showed that the ecological condition of the sites studied were good. In addition, the upper reaches (Headwaters to Trail Creek and Trail Creek to Highway 33) of the Teton River were not identified in the *Teton River Subbasin Assessment and Total Maximum Daily Load* (DEQ 2003c) as impaired or impacted by excess nutrients.

Although the data discussed in the *Teton River Subbasin Assessment and Total Maximum Daily Load* (DEQ 2003c) do not indicate a nutrient impairment in the upper reaches of the Teton River, other reports may suggest otherwise (Fore 2000; Grafe 2002; Thomas et al. 1999). Based on DEQ's preliminary review of the reports, the data and findings appear to be inconclusive; therefore, DEQ would like additional time to conduct a more thorough analysis of the data and findings and develop a monitoring plan with the collaboration of FTR. This plan will involve collecting more recent water quality monitoring data (biological, physical, or chemical) to fill in the data gaps and determine if excess nutrients are impairing beneficial uses in the upper reaches of the Teton River. DEQ intends to make the development and implementation of the monitoring plan a priority, as resources permit.

In conclusion, until a clear demonstration can be made that excess nutrients are impairing beneficial uses, DEQ recommends deferring the listing of the upper reaches of the Teton River for the 2010 Integrated Report. DEQ plans to thoroughly evaluate all existing data and collect additional water quality monitoring data that could assist in determining if excess nutrients are impairing the beneficial uses of the upper reaches of the Teton River.

Comment #27

Assessment Units:	ID17040204SK016_04 ID17040204SK015_04
Water Body:	Teton River-Highway 33 bridge to Bitch Creek

Commenters:	Friends of the Teton River Givens Pursley
Comment:	The Teton River Subbasin Assessment and TMDL indicate that this segment of the Teton River is listed for nutrients based on elevated dissolved nitrogen concentrations and phosphorous. However, it does not appear that the Draft 2010 Integrated Water Quality Report incorporates that information.
Response:	DEQ agrees and apologizes for this oversight. The Assessment Database has been updated to show these assessment units in Category 4a as having an EPA-approved total maximum daily load for nitrogen (nitrate) and total phosphorus. In addition, "cause unknown" has been delisted since nutrients were identified as causing the biological impairment.
Comment #28	
Assessment Unit:	ID17040204SK014_04
Water Body:	Teton River-Highway 33 bridge to Bitch Creek
Commenter:	Friends of the Teton River
Comment:	The Teton River Subbasin Assessment and TMDL indicate that this segment of the Teton River is listed for nutrients based on elevated dissolved nitrogen concentrations and phosphorous. However, it does not appear that the Draft 2010 Integrated Water Quality Report incorporates that information.
Response:	DEQ agrees and apologizes for this oversight. The Integrated Report currently lists total phosphorus in Category 4a but erroneously omitted nitrogen (nitrate). The Assessment Database has been updated to capture nitrogen (nitrate) in Category 4a.
Comment #29	
Assessment Units:	ID17010214PN001_08 ID17010214PN002_08 ID17010216PN002_08
Water Body:	Pend Oreille River
Commenter:	Idaho Conservation League
Comment:	The Pend Oreille River is one of approximately 250 waterways that the Department of Environmental Quality plans to remove from the 303d list, and one of 115 proposed for delisting because DEQ has determined that the water quality standard has been attained in subsequent monitoring (Assessment Units ID17010214PN001_8 and ID17010214PN002_8 and ID17010216PN002_08). Instead of proposing to delist the Pend Oreille River for total phosphorus, DEQ should flag this waterway for subsequent monitoring visits in the next two years to provide a more comprehensive view of the water quality in river. The Pend Oreille River has a history of algae growth associated with phosphorus pollution and should not be delisted based on one year of monitoring data. DEQ had adequate evidence of algae growth and high total phosphorus levels in 2004 and 2005 to justify including the Pend Oreille River on the §303(d) list. The justification for delisting the Pend Oreille River, however, is based on just one year of monitoring – 2009. We believe one year of monitoring is inadequate to determine whether the river is meeting water quality standards. Year to year variations in weather, timing of

runoff, and other climatic factors will influence year-to-year monitoring data; it is unlikely that the land use practices associated with phosphorus impairment have changed since 2004. Regardless, the point of an ongoing monitoring program is to normalize annual fluctuations on impaired waters to move towards development of an appropriate total maximum daily load (TMDL) for the contaminant. Consistent monitoring on impaired waters allows the regulatory agency to get a clear picture on the effects of impairment over time. No data driven program should change the status of any existing impaired water body based on one year of data alone.

As an example, 2009 was not a representative year for algae growth or aquatic weeds in this watershed. The county has been battling the aquatic invasive Eurasian watermilfoil in this river for several years now. The large snowpack in 2009 (43.4 feet at Schweitzer Basin SNOTEL site in 2009 compared to 37.1 feet at the same SNOTEL site in 2005), and combined with warm springtime temperatures created a high, cold runoff, stunting weed growth. The deep winter drawdown of Lake Pend Oreille that followed and a hard winter freeze of the nearshore areas of the lake and riverbed also stunted algal and weed growth. Aquatic weed managers locally and at the state Department of Agriculture have said the conditions in 2009 and 2010 were unusual and they predict that the thick infestations in the nearshore areas are likely to return. In addition, the climate trends favor increased weed and algae growth, because of the frequency of lower snowpacks and earlier runoffs. With continued population growth and increased phosphorus loading associated with human activities and land use practices, it only makes sense to conduct additional years of monitoring before delisting the Pend Oreille River.

Response: While DEQ will continue to monitor the Pend Oreille River regardless of the listing status, we did not base our proposed delisting of total phosphorus (TP) on just one year of data. Rather, DEQ conducted a thorough analysis of all existing and readily available Tier I data to understand the correlation between TP concentration and beneficial use impairment in the Pend Oreille River. This effort included an analysis of 2003–2004 data collected by the Tri-State Water Quality Council (TRWQC), data collected in 2009 by DEQ, an aquatic plant study conducted in 2007 and 2008 by Mississippi State in the Pend Oreille River in Idaho, and data collected from 1984 to 2008 by Washington Department of Ecology downstream of the Idaho/Washington border at Newport. DEQ is not aware of any water quality data collected in 2005 on the Pend Oreille River. The analyses are detailed in Attachment A. Our analysis also included a comparison of all existing TP data with numeric interpretations of the narrative standard, detection and qualitative evaluation of visible periphytic and epiphytic algae growth, an evaluation of rooted aquatic plant communities within the river, an evaluation of dissolved oxygen profiles, and modeling. Details of this evaluation are provided in Attachment A, and they suggest the following:

1. The targets defined in the *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho* (DEQ 2002) are inappropriate for use in beneficial use support evaluations on the Pend Oreille River.
2. There is a decreasing trend of TP in the river with time.
3. The Pend Oreille River system is assimilating TP at its current concentrations.
4. While there are localized areas of concern for nonnative plants, there is much diversity in the native aquatic plant community in the river.
5. Beneficial uses as related to TP in the river are not impaired.

While our beneficial use support analysis of the Pend Oreille River was based on several factors, DEQ maintains that the Pend Oreille River was experiencing representative water quality in 2009, and it was not influenced by significantly higher river flows and cooler temperatures. Analysis of hydrologic and water quality conditions in 2009 compared to previous years indicate flow and water quality conditions were clearly within the average range. Details of this analysis are provided in section 6 of Attachment A.

There appears to be a misconception by the Idaho Conservation League that a correlation was made between algae growth and the 2003–2004 TSWQC TP data. No such correlation was made. Rather, TRWQC's assessment of the data was based on an inappropriate comparison of the data with nearshore TMDL targets of Pend Oreille Lake and an improper assessment of the relevance of nearshore TMDL targets with beneficial use support in the river. As was stated earlier, our more recent analysis of all existing data suggests beneficial uses as related to TP in the Pend Oreille River are not impaired.

DEQ shares your concern about the presence of Eurasian watermilfoil in the Pend Oreille River. However, DEQ argues there is enough data to suggest there is still good diversity in native plant species throughout the river system, and public use is not inhibited on the river due to the presence of milfoil (Madsen and Wersal 2008, 2009; Personal communication, Tom Woolf, Idaho State Department of Agriculture [ISDA] 2011). Results of these evaluations are detailed in section 5 of Attachment A. In addition, Eurasian watermilfoil in the Pend Oreille River has significantly decreased as a result of the successful aggressive management actions taken since 2006 by the Idaho State Department of Agriculture coupled with two years (2009–2010) of favorable winter drawdown conditions in Pend Oreille Lake and Pend Oreille River (Personal communication, Tom Woolf, ISDA, 2011). The Idaho State Department of Agriculture states that unfavorable winter drawdown and/or warm spring/early runoff conditions may stimulate nuisance growth of aquatic weeds *if management does not continue due to reduced funding* (Personal communication, Tom Woolf, ISDA, 2011).

Comment: The presence of aquatic invasive species Pend Oreille River is an indicator of impaired waters. In 2008, the county identified 1,664 acres infested with Eurasian watermilfoil, of which 804 acres were in the Pend Oreille River. The massive infestations of the noxious weed have impacted the beneficial uses of the river – both from a recreation and an aesthetic standpoint. Fish and wildlife managers have expressed concerns about fish becoming entangled and/or lacking oxygen in these dense weedbeds. Recognizing the negative impacts from widespread infestation, the state of Idaho has invested nearly $4 million to attempt to rid Bonner County of Eurasian watermilfoil since 2005. Aquatic weeds thrive in a nutrient-rich environment by taking up phosphorus. Idaho's water quality standards state that "Surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses." (IDAPA 58.01.02.200.04) Although the state relies primarily on the presence of algae and does not generally consider "other nuisance aquatic growths" in its evaluation, the increase of aquatic weeds in recent years is an indication of an impaired watershed and of a likely nutrient problem.

Response: There appears to be a misconception by the Idaho Conservation League that there is a direct relationship between growth and distribution of Eurasian watermilfoil and the concentration of TP in the water column. DEQ argues an increase in aquatic weeds in recent years is NOT an indication of an impaired watershed and of a likely nutrient problem. Rather, there is enough data to suggest there is still good diversity in native plant species throughout the river system, and public use is not inhibited on the river due to the presence of milfoil (Madsen and Wersal 2008, 2009; Personal communication, Tom Woolf, Idaho State Department of Agriculture, 2011). Results of these evaluations are detailed in section 5 of Attachment A.

The ecology of Eurasian watermilfoil is complex. While localized spread is through root crowns and runners, the primary mechanism for intermediate and long-distance dispersal of this nuisance species into new habitat is through stem fragmentation through mechanical damage and dispersal by means of water current and recreational boat traffic (Smith and Barko 1990; Madsen and Smith 1997). Factors that influence growth and morphology of Eurasian watermilfoil include water clarity, water temperature, inorganic carbon levels, mineral nutrients, sediment texture, water alkalinity, water movements, ice scour, and desiccation and freezing (Smith and Barko 1990). Although nutrient-enriched soils can increase milfoil growth, it is more widely accepted that light and temperature are the major limiting factors for growth and distribution of this species (Barko et al. 1986).

Contrary to what the Idaho Conservation League implies, DEQ data indicates beneficial uses of the river are not impaired by low dissolved oxygen concentrations. In 2009, DEQ monitored dissolved oxygen concentrations in targeted areas believed to have conditions for the highest oxygen demand and plant growth. Monitoring results indicated that dissolved oxygen concentrations were above 8.11 milligrams/liter during the critical summer months—levels supportive of aquatic life use. In addition, modeling performed by Portland State University (PSU 2006) shows that a calibrated simulation of dissolved oxygen concentrations above Albeni Falls never fall below 7.5 milligrams/liter. Modeling provides a second demonstration that reduced dissolved oxygen is not likely occurring in the Idaho reaches of the Pend Oreille River. Details of the dissolved oxygen monitoring are in sections 4.2 and 8 of Attachment A.

Comment: Although the standard for total phosphorus is narrative, numeric phosphorus measurements taken in 2009 were well above the nearshore Lake Pend Oreille TMDL. At least three monitoring sites were above 9 ug/L, which is the target for Phosphorus established in the Lake Pend Oreille nearshore TMDL. While the state water quality standards for phosphorus are narrative and not numeric, the numeric data collected during 2009 includes some measurements for phosphorus that are alarmingly high. According to DEQ's monitoring data, Riley Bay shows levels above 20 ug/L. Another bay just a couple miles upstream of the Albeni Falls dam at the Half Circle monitoring site showed levels above 30 ug/L.

Response: The targets defined in the *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho* (DEQ 2002) are inappropriate for use in beneficial use support evaluations on the Pend Oreille River. DEQ analyses of beneficial use support in the Pend Oreille River are provided in Attachment A. The results of the analyses show that the Pend Oreille River system is assimilating total phosphorus at its current concentrations, even in areas such as Riley Bay and Half Circle, and beneficial uses are not impaired due to nuisance aquatic plant growth.

Comment #30

Assessment Unit:

Water Body:

Commenter: Idaho Conservation League

Comment: The exclusion of waters from Category 5 of the draft 2010 IR based on the argument that the impairment is not caused by a "pollutant" is inconsistent with the Clean Water Act.

According to the Clean Water Act, states must identify waters for which "best practicable control technologies" (Section 1311(b)(1)(A)) and secondary treatment at sewage treatment plants (1311(b)(1)(B)) are, by themselves, not adequate "to implement *any water quality standard* applicable to such waters." 33 U.S.C. § 1313(d)(1)(A).

As a matter of law then, waters listed in section 4C as impaired by "pollution" must be moved to section 5 (the 303(d) list) if any applicable water quality standard (including a use, a criterion, and/or the antidegradation policy) is not, or is not expected to be, met. This would include waters listed in the draft report as impaired by flow or habitat alteration if any standard is affected. So, if the aquatic life use is impaired due to habitat alterations, that water must be listed in section 5 (the 303(d) list) under the statute.

Although the relevant regulations may muddy the waters (by discussing "pollution" at some points and "pollutants" at others), regulatory provisions cannot lawfully be used to amend the statutory criteria governing the listing process, or to decline to identify for TMDL establishment a water that the statute indicates must be identified. See, e.g., Social Security Admin. v. FLRA, 201 F.3d 465, 471 (D.C. Cir. 2000) ("A regulation which … operates to create a rule out of harmony with the statute, is a mere nullity.").

Even if the above was not established in law, the regulations do not separate "pollutants" from "pollution" for listing purposes. The listing portion of the regulations reads, in part:

(1) Each State shall identify those water quality-limited segments still requiring TMDLs within its boundaries for which:

(i) Technology-based effluent limitations required by sections 301(b), 306, 307, or other sections of the Act;

(ii) More stringent effluent limitations (including prohibitions) required by either State or local authority preserved by section 510 of the Act, or Federal authority (law, regulation, or treaty); and

(iii) Other pollution control requirements (e.g., best management practices) required by local, State, or Federal authority are not stringent enough to implement any water quality standards (WQS) applicable to such waters.

(3) For the purposes of listing waters under § 130.7(b), the term "water quality standard applicable to such waters" and "applicable water quality standards" refer to those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements.

40 CFR § 130.7(b)

The language here does not contemplate any separation between "pollutant" and "pollution." Instead, the regulation reiterates that the list is to include consideration of any applicable water quality standard.

Response: DEQ disagrees that waters impaired by pollution must be listed in Category 5. Section 303(d) of the Clean Water Act (CWA) requires total maximum daily loads (TMDLs) be calculated for "pollutants." Flow alteration for example, is not a pollutant as defined by the CWA (see CWA §502(6), CWA §502(19) and EPA 2005).

The sole purpose of Category 5 is to identify and prioritize assessment units (AUs) for TMDL development.

Category 5 is reserved for impaired AUs that need a TMDL. Circumstances exist that can impair an AU but for which DEQ cannot write a TMDL.

These circumstances include the following:

1) The AU has a U.S. Environmental Protection Agency established TMDL.

2) The AU has a Category 4(b) justification.

3) Impairment is due to a nonpollutant (flow or habitat alteration).

AUs that fall into one of these 3 situations are placed in Category 4 of the Integrated Report. Category 4 is defined as AUs with impaired beneficial use(s) and/or which fail to meet water quality standards.

Two points should be emphasized here: 1) AU-pollutant combinations are independent of one another and therefore an AU can appear in both Category 4 and Category 5 and 2) when an AU is found in Category 4, it means the AU is still impaired. It is not until the TMDL or other remedial plan is implemented that DEQ will re-monitor and assess whether the AU continues to be impaired. When DEQ can demonstrate that the AU supports beneficial uses and meets water quality standards, the AU will be moved into Category 2.

Impairment by flow and/or habitat alteration is not suitable for TMDL development. Almost all AUs in Category 4c are impaired by other causes such as sediment. TMDLs are then developed for those pollutants best suited for TMDL development. Implementing those TMDLs can often work to address flow and habitat alteration impairments.

Out of the 408 unique AUs currently in Category 4c, only 37 of them, or 9.1%, are not listed in any other category. This means that 90.9% of the AUs listed in Category 4c are also listed in Category 4a and/or Category 5.

Comment #31

Assessment Unit:

Water Body:

Commenter: Idaho Conservation League

Comment: The assumption that all waters in wilderness and select roadless areas met all water quality standards is not based in fact. The Agency must not place these waters into Category 1 without information to back up the claim. Where no data exists, these waters should be placed in Category 3 and scheduled for monitoring.

Response: Waters that have been placed in Category 1 of the Integrated Report are those assessment units that fall entirely within a designated wilderness or inventoried roadless area. DEQ believes these waters meet the intent for establishing natural background conditions by virtue of the fact that there has been little to no significant human management to cause changes in water quality or affect beneficial uses. When Congress designates an area as wilderness, the main reason is because it meets the criteria of low human impact.

DEQ solicits information that would indicate why any particular water should not be included in Category 1. This data needs to demonstrate that human impacts are impairing water quality. In the absence of such data, DEQ will proceed with the presumption that wilderness and roadless waters are unimpaired and place them in Category 1 of the Integrated Report.

This policy is not applied to previously listed waters; thus, there are no delistings associated with this policy, and the policy only applies to waters that DEQ has not yet assessed ("no data" waters) or has assessed as fully supporting and within areas that fall under the roadless/wilderness definition.

Comment #32

Assessment Unit:

Water Body:

Commenter: Idaho Conservation League

Comment: Canals should be assessed as "Waters of the United States".

The Clean Water Act (40 CFR § 230.3) defines "waters of the United States" as waters where:

"…degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational

or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or

foreign commerce; or

(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under this definition;

(5) Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;"

As such, Idaho's canals should be assessed as waters of the United States in the draft report.

Many canals throughout southern Idaho discharge into navigable waters such as the Snake River and the Boise River. Canals can contribute to the degradation or destruction of waters used for commerce, recreation, or travel. As an example, DEQ has studied the effects of irrigation return flows into the Lower Boise since the late 1970's (*Boise River Study Ada County, 1980*). Recent efforts by the City of Boise to participate in pollution trading at the Dixie Drain for phosphorus on the 303(d) listed Star to Notus section of Lower Boise River further highlight the impacts of canal return flow on water quality. The Dixie Drain, although considered a "non-point" source, should be considered as a water of the state. ICL believes that although land practices are responsible for "non-point" source pollution, the Dixie Drain is an example of a waterbody whose water quality affects the Boise River. Because canals throughout southern Idaho impact water quality in navigable waters, such canals should be regulated and monitored as waters of the state.

Response: Whether canals are considered "waters of the United States" is a determination that is made by the U.S. Army Corps of Engineers and the EPA. Idaho water quality standards treat canals and other man-made waterways as "waters of the State."

According to IDAPA 58.01.02.101.02, man-made waterways (e.g., canals) are to be protected for the use for which they were developed, unless designated in Sections 110 through 160. This provision has been a part of EPA-approved Idaho water quality standards since 1980. Canals are created in order to provide agricultural or irrigation water supply. Canals are not created to provide aquatic life or recreation beneficial uses; therefore, unless aquatic life or recreation uses are specifically designated for a canal, DEQ will not assess whether canals support aquatic life or recreation beneficial uses. Instead, DEQ will assess whether canals are supporting the agricultural and industrial water supply uses. According to Section 8.2 of the *Water Body Assessment Guidance,* (Grafe et al. 2002), DEQ presumes agricultural and industrial water supply uses are fully supported unless there is evidence to the contrary. Where DEQ determines an undesignated water body is not man-made (e.g., a modified natural water course), then DEQ will assess whether that water body supports the uses for which it is protected, either existing or presumed.

Comment #33

Assessment Unit:

Water Body:

Commenter: Idaho Conservation League

Comment: Improvements should be made to increase public involvement. Scheduled public meetings and improvements in the way the draft report information is displayed could improve public involvement. At the very least, DEQ should add a legend for the mapping tool.

The "identity" icon could be utilized as a way to identify individual waters and pull up all relevant assessment reports for that waterbody. This way, one could easily find if the status of the water is proposed to change, the data supporting such a decision, and any notes provided by the associated staffer.

Selecting a sub-basin, finding non-supporting waters, and then searching through the lists of Idaho's waters to find the water of concern is the only way to find this information. By tagging waters with their name, relevant monitoring data, and any status modifications to the identity icon you would save much time and effort for reviewers. DEQ would likely receive more effective and helpful comments if these improvements were made.

Finally, the assessment reports would be greatly improved by adding a short narrative. Such a narrative should describe any modifications to waterbody listings, a clear description of monitoring events including dates, and information on the Category in which the water is listed. The current format of the assessment report is not easy to read or evaluate.

With these improvements and the addition of public meetings as a part of the comment period, DEQ could greatly improve public involvement and access to this report.

Response: Thank you for your comments. Budget considerations limited the amount of public education we could do outside of using the web. In previous years, DEQ conducted more outreach to better inform the public and answer any questions they may have. DEQ will consider your suggestions as we plan for the 2012 Integrated Report, and hopefully the state and DEQ will be in a better economic situation.

A legend icon is displayed on the right-hand side of the interactive map. It is labeled "Show Legend."

Comment #34

Assessment Unit:	
Water Body:	Icehouse Creek Willow Creek Sheridan Creek Buffalo River Henrys Lake Outlet
Commenter:	Henry's Fork Foundation
Comment:	The draft Upper and Lower Henrys Fork TMDL included PNV assessments on ten streams in the Upper Henrys Fork, including Icehouse Creek, Willow Creek, Sheridan Creek, Buffalo River and Henrys Lake Outlet. However, the final TMDL omitted these five noted streams and subsequently these streams were not listed in Category 5 (303(d)) for temperature on the draft 2010 IR. The PNV data showed these five streams to be shade impaired and should be included in Category 5 for temperature in the 2010 IR.
Response:	The draft *Upper and Lower Henry's Fork Total Maximum Daily Loads: Addendum to the Upper Henry's Fork Subbasin Assessment and TMDLs* included potential natural vegetation (PNV) assessments for the following streams: Icehouse Creek, Willow Creek, Sheridan Creek, Buffalo River, and Henrys Lake Outlet. These assessments were completed in error because no continuous temperature data existed to indicate that water quality standards were violated. None of these streams were listed in Category 5 (the §303(d) list) of Idaho's 2008 Integrated Report for temperature, so they were omitted from the final TMDL. Additionally, based on the evaluation of this comment, it was discovered that the final Upper and Lower Henrys Fork TMDL addendum (DEQ 2010b) and *Portneuf River TMDL Revision and Addendum* (DEQ 2010a), approved in August 2010 and July 2010, respectively, were not reflected in the EPA's Assessment Database. Therefore, the Assessment Database was updated to capture the approved TMDLs. Proposed delistings for reasons other than a U.S. Environmental Protection Agency approved TMDL will be dealt with in the 2012 Integrated Report.

Comment #35

Assessment Unit:	ID17040105SK009_02
Water Body:	Sage Creek-Source to Mouth
Commenter:	J.R. Simplot Company
Comment:	The description for this segment should be changed to "North Fork Sage Creek" since this segment ends at the confluence with the main stem of Sage Creek. Additionally, based on sampling data, the upper portion of this reach is meeting water quality standards for selenium where as the lower portion is not. Therefore, we recommend this AU to be split into two segments, "Upper North Fork Sage Creek" and "Lower North Fork Sage Creek". Additionally, we recommend "Upper North Fork Sage Creek" be delisted for selenium.

Response:	DEQ is willing to accommodate your suggestion of a new description for this assessment unit (AU). The appropriate changes to the Assessment Database have been made. Additionally, at this juncture it is DEQ's opinion to not grant the request to split this AU without further investigation of selenium impacts to this reach or until additional monitoring data show this AU is in compliance. The data submitted confirms that this AU remains out of compliance with water quality standards.
Comment #36	
Assessment Unit:	ID17040105SK009_02c
Water Body:	Sage Creek
Commenter:	J.R. Simplot Company
Comment:	It is recommended that this AU be delisted for selenium.
Response:	This assessment unit is not listed for selenium.
Comment #37	
Assessment Unit:	ID17040105SK009_02d
Water Body:	Pole Canyon Creek
Commenter:	J.R. Simplot Company
Comment:	Monitoring data collected in 2008 and 2009 suggests that this segment is meeting water quality standards for selenium. Therefore, we recommend this AU be delisted for selenium.
Response:	DEQ agrees that the remedial action has shown some early success in abating selenium concentration in Pole Canyon Creek below the overburden disposal area (ODA). However, DEQ needs to see continued success from Simplot's remedial action before considering delisting this AU for selenium.
Comment #38	
Assessment Unit:	ID17040105SK009_02e
Water Body:	South Fork Sage Creek
Commenter:	J.R. Simplot Company
Comment:	The upper portion of this reach is meeting water quality standards for selenium where as the lower portion is not. Therefore, we recommend this AU to be split into two segments, "Upper South Fork Sage Creek" and "Lower South Fork Sage Creek". Additionally, we recommend "Upper South Fork Sage Creek" be delisted for selenium.
Response:	DEQ agrees that current data support splitting this assessment unit (AU); however, we are unwilling to accommodate this request in the 2010 integrated reporting cycle. The Haul Road to F-panel was recently constructed and DEQ is interested in seeing additional data over time before splitting this AU. Should additional data collection between now and the 2012 Integrated Report cycle confirm that the South Fork of Sage Creek continues to meet water quality standards at monitoring station LSS-SP-0, DEQ may consider splitting the AU and recommend delisting the upper porting of this reach.

Comment #39	
Assessment Unit:	ID17040105SK009_03
Water Body:	Sage Creek
Commenter:	J.R. Simplot Company
Comment:	The description for this AU should be changed to "Sage Creek-confluence with North Fork Sage Creek to mouth".
Response:	DEQ is willing to accommodate your suggestion of a new description for this assessment unit. The appropriate changes to the Assessment Database have been made.

Comment #40	
Assessment Unit:	
Water Body:	Pend Oreille River
Commenter:	Cynthia Mason
Comment:	DEQ has decided to remove the Pend Oreille River's protection status based on only one year of water quality testing and one year of visually monitoring for algae growth. Some of the water quality tests indicated elevated levels of phosphorus. The Idaho State Dept. of Agriculture also conducted a post-treatment survey of invasive weeds at the end of this summer and found Eurasian milfoil and other nuisance weeds growing after efforts of eradication with herbicides. I understand that phosphorus feeds weeds and algae. It would seem reasonable for DEQ to continue to monitor the Pend Oreille River for at least another 2 year management plan. After a couple more years of monitoring if elevated levels of pollutants are not found, then it would seem safe to remove it from the protection it richly deserves. The Pend Oreille River should be protected with any pollution controls available as more sewage systems are permitted to dump into the river (Sagle for instance). As our area experiences more growth, the river will be in need of more protection rather than less. I am hoping that the Integrated Report and TMDLS will be restored for the Pend Oreille River.
Response:	DEQ has made a thorough evaluation of all data available within the last 5 years to determine the proposed delisting of total phosphorus (TP) as a cause of impairment to the Pend Oreille River. This effort included an evaluation of the 2003–2004 data collected by TSWQC, data collected in 2009 by DEQ, an aquatic plant study conducted in 2007 by Mississippi State in the Pend Oreille River in Idaho, and data collected from 1984 to 2008 by Washington Department of Ecology downstream of the Idaho/Washington border at Newport. The analyses are detailed in Attachment A. From our analyses, DEQ believes there is enough evidence to conclude that beneficial uses as related to TP are currently supported in the Pend Oreille River. DEQ shares your concern about the presence of Eurasian watermilfoil in the Pend Oreille River. However, current literature has shown there is NO direct relationship between growth and distribution of Eurasian watermilfoil and the concentration of TP in the water column. The ecology of Eurasian watermilfoil is complex, and there are many factors that influence its growth and morphology (Barko and Smart 1981; Barko et al. 1986; Carignan 1980, 1985). Recent information collected on aquatic plant communities in the Pend Oreille River suggests that while milfoil is problematic in localized areas in the river, there is still good diversity of native plant communities within the river. Furthermore, public use is not

	inhibited, nor are beneficial uses impaired in the Pend Oreille River from nuisance aquatic plant growth. Details of DEQ's aquatic plant and algae investigation are described in section 5 of Attachment A.
Comment #41	
Assessment Units:	ID17010214PN001_08 ID17010214PN002_08 ID17010216PN002_08
Water Body:	Pend Oreille River
Commenter:	Lake Pend Oreille Waterkeeper
Comment:	Evidence suggests that total phosphorous levels are high in the Pend Oreille River. Attached to these public comments is evidence of "nuisance aquatic growths" demonstrating excess levels of TP in the River, which impairs its beneficial uses. IDEQ is obliged to consider "all existing and readily available" information unless it can demonstrate "good cause" to not consider the information. 40 C.F.R §130.7(b)(6)(iv)(2010). Further, EPA is required to consider "at a minimum all existing and readily available water quality-related data and information" including reporting and information gathered by members of the public. See 40 C.F.R. § 130.7(5). This information must be water body specific, and include historic records. See Sierra Club v. Leavitt, 488 F.3d 904 (11th cir. 2007). Idaho Water Quality Standards contain a narrative standard to determine whether TP levels in the State's waterbodies exceed their designated beneficial uses. See WQS § 200. Idaho WQS require that "[s]urface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses." WQS § 200.06. Additionally, "[s]urface waters of the state shall be free from oxygen demanding materials in concentrations that would result in an anaerobic water condition." WQS § 200.07. Specific evidence of the presence of high levels of TP will be discussed below. [sic]
Response:	Attached to the public comments are 4 images, DEQ's 2009 monitoring results and quality assurance tracking sheet, and an analytical report from SVL Analytical from one event at three stations with sample IDs of Priest River, West Dover, and Condo Del Sol. The samples were taken on November 9, 2010, and submitted for analysis the same day. The analytical report includes laboratory quality control results. Included with the pictures was the following description: > Shoreline photographs reveal visible sludge. The photographs show high levels of visible slime and other nuisance aquatic growths on the River. As evidenced in the pictures, the oxygen-demanding aquatic growths inhabit bays and shorelines that could otherwise be used for Primary Contact Recreation and scenic viewing. These growths inhibit the River's designated beneficial uses because residents and visitors will not swim in these and other similar areas. It is therefore evident that high levels of TP are creating nuisance aquatic growths that impair the River's beneficial use. The photographs show visible slime growths in receding water at two different areas along Pend Oreille River—although the exact location or date of image is unknown. One image appears to be taken when Pend Oreille River is significantly less than full pool, which implies the pictures were taken sometime after labor day. These receding water areas are stagnant water next to the active river channel, and they are usually a result of the drop in water elevation at Albeni Falls Dam. The

photograph shows algae growth in stagnant water that is likely the result of higher temperatures on what may be saturated anaerobic soils—conditions favorable for phosphate release and algae growth. The amounts of visible slime growth shown in these images is of concern, but they are very localized and are not representative of the Pend Oreille River assessment unit ID 17010214PN00l_08 (hereafter referred to as 01_08). The water quality evaluation DEQ performed for Pend Oreille River (01_08) is for the waters between Pend Oreille Lake and the Priest River, which flows for 32.56 miles, is up to 2 miles wide, is on average 25 to 30 feet deep during full pool, and has a base flow between 8,000 and 13,000 cubic feet per second. Any assessment of visible slime growth impairment of beneficial uses within this assessment unit must be made from representative areas. More information is needed as to the scale and duration of these slime growths and how they prevent attainment of a designated beneficial use. As such, the Coeur d'Alene Regional Office staff considers the provided images Tier III data and not sufficient for a use support determination based on the scientific rigor and relevance used to collect and analyze the data, as well as the data's significance to the assessment process.

Comment: DEQ's own monitoring results show high levels of total phosphorous in the River. Monitoring results from 2005 and 2009 demonstrate high levels of TP in the River. Seven of the eleven monitoring sites in IDEQ's 2009 Monitoring Results came back with TP results exceeding the 9 µg/l limit set in the Pend Oreille Lake Nearshore TMDL. In total, there were 9 instances of TP exceedances in the 40 monitoring results. These instances of high levels of TP were not isolated to a specific location or time frame, they were found throughout the River and throughout the summer months.

In 2005, monitoring results performed by the Tri-State Water Quality Council ("TSWQC") revealed that there were high levels of TP in the River. Based in part on these numeric quantities and primarily on the narrative qualities, which impaired the River's designated beneficial uses, DEQ and EPA included TP on its 303(d) list for the River. Aiding their decision to include TP on the 303(d) list, IDEQ and EPA relied on the TSWQC's TP monitoring. The TSWQC measured TP around the River and found that two of their five monitoring sites exceeded the numeric 9 µg/l limit.14

In 2009, IDEQ found even more sites exceeding the Lake Pend Oreille Nearshore TMDL non-binding numeric limit of 9 µg/l limit. The sampling indicated nine violations from seven of the eleven different monitoring locations.15 The data demonstrates that TP is increasing, not decreasing in the River. Based on the numeric results from both the 2009 IDEQ monitoring of the River and the 2005 TSWQC monitoring reports, there is insufficient evidence to delist the River for TP. Furthermore, as discussed below, such numeric results should not be the sole means by which the River is delisted for TP. Delisting TP is not appropriate based on the observations of algae blooms and floating scum in violation of IDEQ's narrative WQS. See WQS §§ 205-07; see also Appendix. [sic]

Response: DEQ agrees that the delisting of the Pend Oreille River should not be based on numeric results alone. DEQ's proposed delisting of total phosphorus (TP) as a cause of impairment to the Pend Oreille River is based on a thorough analysis of all existing and readily available Tier I data recently collected on the Pend Oreille River. This analysis included a comparison of all existing TP data with numeric interpretations of the narrative standard, detection and qualitative evaluation of visible periphytic and epiphytic algae growth, an evaluation of rooted aquatic plant communities within the river, an evaluation of dissolved oxygen profiles, and modeling. Details of this evaluation are provided in Attachment A, and they suggest the following:

1. The targets defined in the *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho* (DEQ 2002) (hereafter referred to as the Pend Oreille Lake Nearshore Nutrient TMDL) are inappropriate for use in beneficial use support evaluations on the Pend Oreille River.
2. There is a decreasing trend of TP in the river over time.
3. The Pend Oreille River system is assimilating TP at its current concentrations.
4. While there are localized areas of concern for non-native plants, there is much diversity in the native aquatic plant community in the river.
5. Beneficial uses as related to TP in the river are not impaired.

Idaho's water quality standards do not include numeric TP criteria. Therefore, DEQ does not base listing decisions solely on TP concentrations alone. Nevertheless, the Pend Oreille Lake Nearshore Nutrient TMDL was a starting place for DEQ to evaluate the 2003–2004 data submitted by the Tri-State Water Quality Council (TSWQC). Lake Pend Oreille Waterkeeper is correct in that the original inclusion of TP as a cause of impairment to the Pend Oreille River was based on data compared to the Pend Oreille Lake Nearshore Nutrient TMDL TP targets. The TMDL includes a seasonal target aimed at protecting water quality during the critical summer months (latter half of July, August, first half of September) when the lake is most vulnerable to the impact of excessive nutrient loading. However, the 0.009 milligram/liter (mg/L) target represents an *average* concentration throughout the nearshore waters of Pend Oreille Lake, and it is not intended for grab samples at individual locations, such as those taken by TSWQC in 2003–2004. Therefore, the comparison of 2003–2004 monitoring data with the 0.009 mg/L TMDL target is inappropriate. The TMDL has a secondary target of 0.012 mg/L, which represents an *instantaneous* concentration used to evaluate isolated conditions represented by grab samples collected during routine monitoring. This target was an appropriate starting point from which to evaluate the data.

DEQ is not aware of any water quality data collected in 2005 on the Pend Oreille River. Our analysis was based on Tier I data collected in 2009 by DEQ. When DEQ compared the 2003–2004 data to the TMDL secondary target of 0.012 mg/L, 19 of the 20 samples were below the 0.012 mg/L grab-sample target. The sample above the target was 0.020 mg/L; however, it was determined upon further analysis to be an outlier for two reasons: 1) it is not representative of conditions during the critical summer months as defined in the Pend Oreille Lake Nearshore Nutrient TMDL and 2) this sample was collected in June when the variability of suspended particles can greatly affect TP analysis results. During high flow events (which are typical in June), more particles are suspended in the water column and the variability in the percentage of particles from sample to sample may be significant (USGS 2000). In addition, because the 2003–2004 data were reported without quality assurance analysis, even though a quality assurance project plan (QAPP) had been developed, we have no basis for reliability of this value or others collected during those years.

A preliminary analysis of 2009 TP concentrations indicated concentrations typically below 0.012 mg/L in all but 4 of the 38 grab samples; 3 of these "exceedances" took place in nonrepresentative locations in July at Half Circle, Murphy Bay, and Riley Bay. The fourth "exceedance" occurred in Riley Bay in August.

While monitoring results from 2003–2004 and 2009 characterize TP in the Pend Oreille River, TP cannot be qualified as "high" until evaluated against how the TP concentration affects designated beneficial uses. The comment above is based on a misconception that an evaluation of beneficial use impairment was made when making the original listing decision. While the original 2008 listing was based on best professional judgment at the time, no such correlation was made between beneficial use support and the 2003–2004 TP data. In addition, the 2008 Integrated Report assessment did not take into account the difference between the lentic waters of Pend Oreille Lake and the lotic waters of the Pend Oreille River. The lentic targets in the Pend Oreille Lake Nearshore Nutrient TMDL are desired conditions and are based on anecdotal information that indicated an increasing trend in nuisance algae growth in the nearshore areas of the lake. However, the Pend Oreille Lake Nearshore Nutrient TMDL made no correlation between water quality and beneficial use support in the river.

The characterization of algae growth was critical in evaluating whether designated beneficial uses were impaired and whether the "exceedances" of the nearshore targets were applicable to the Pend Oreille River. Results from 2009 indicated a range of no or low epiphytic algae growth, even in the nearshore (bay) sites on the river in July where the TMDL "exceedances" were observed. This important information led to the conclusion that the targets in the Pend Oreille Lake Nearshore Nutrient TMDL were inappropriate for the Pend Oreille River—even in the bay sites of the river. In 2007 and 2008, Mississippi State University conducted surveys of rooted aquatic plants in the Pend Oreille River. Results indicate that while there are areas of concern for non-native aquatic rooted plants, there is a diversity of native plants within the river capable of supporting the aquatic ecosystem (Madsen and Wersal 2008, 2009). In 2010, an increase in Eurasian watermilfoil was observed throughout the river, and there are localized areas within the river where a monoculture of milfoil is present. However, there is still good diversity in native plant species throughout the river system, and public use is not inhibited on the river due to the presence of milfoil (Personal communication, Tom Woolf, ISDA, 2011). Results of these evaluations are detailed in Attachment A, section 5.

Water quality and TP concentration trends have been evaluated in a recent TSWQC report, *Water Quality Status and Trends in the Clark Fork-Pend Oreille Watershed for the 1984–2008 Period* (TSWQC 2009). Data analyzed for the TSWQC report were collected in June–September by Washington Department of Ecology just downstream of the Idaho/Washington border at Newport, Washington. TSWQC reported a 4.8% decrease in TP between 1998 and 2007, but cited outliers and a change in detection limit that may have skewed this result. To address the issues of detection limit and outliers put forth in the TSWQC report, DEQ conducted a trend analysis on the same TP data collected between June and September by Washington Department of Ecology at Newport. Results of the analysis showed that TP concentrations during the critical summer months (July–September) have been less than 0.012 mg/L since 2000, and there is a decreasing trend of TP concentrations over the period of record during the months June–September. Details of both trend analyses are provided in Attachment A, section 7.

Understanding the correlation between TP concentration and beneficial use impairment goes beyond evaluating TP concentrations, which is why Idaho has a narrative water quality standard for nutrients. As such, DEQ conducted a multipronged approach to evaluate the existence of such a correlation (this included evaluating dissolved oxygen, which was not discussed in this response). Results of this evaluation indicate there is sufficient evidence that beneficial uses as related to TP are supported in the Pend Oreille River and there is sufficient evidence to delist the river for TP.

Comment: Lake Pend Oreille Waterkeeper’s total phosphorous sampling results demonstrate high levels of phosphorous in the river. LPOW tested for TP in three locations on the River on Tuesday, November 9th, 2010 and had them processed at SVL Analytical, a certified laboratory. Results indicate a further increasing trend of TP in the River. Results are as follows:

- sample taken near Condo Del Sol in Sandpoint showed a TP level of 45.2 ug/L
- sample taken west of Dover Bay showed at TP level of 21.8 ug/L
- sample taken west of Priest River showed at TP level of 18.3 ug/L

All three of these samples indicate TP level well above the Pend Oreille Lake Nearshore Nutrient TMDL goal of 9ug/L. The sample from the Condo Del Sol area is five times that goal. These results clearly indicate that TP levels are high in the River. [sic]

Response: The *Water Body Assessment Guidance* (WBAG II) describes DEQ's methods for evaluating chemical, physical, and biological data to determine beneficial use support of Idaho’s streams and rivers (Grafe et al. 2002). Although DEQ primarily uses DEQ monitoring data to assess beneficial use support of a water body, third-party data can be used in the assessment process. DEQ categorizes data into three tiers depending on its scientific rigor and relevance. Scientific rigor concerns the extent that scientific methods are used to collect and analyze data. These methods include quality assurance, quality control, training, level of expertise, and protocols. Data relevance concerns the geographic location of the data with respect to a water body and its relevance to a water quality standard, beneficial use, or cause of impairment.

DEQ appreciates receipt of the total phosphorus (TP) monitoring data collected on November 10, 2009, by Lake Pend Oreille Waterkeeper. However, these data will be considered Tier III data. Tier III data lack scientific rigor or relevance and are not sufficient for use in making beneficial use support decisions for Idaho’s Integrated Report or regulatory actions. These data are also not used for subbasin assessments or total maximum daily loads (TMDLs). They can, however, be used to make decisions on future monitoring efforts. Tier III data is collected by unknown and/or untrained individuals following no standard or reported protocol. The data are not representative of a water body; it is extrapolated from another site, or it is from a site with very localized conditions. The data submitted by Lake Pend Oreille Waterkeeper were provided without any originating documentation as to the scientific rigor of data. More information is needed, including identification that collection was performed by known trained individual(s) and that data were collected or analyzed following standard or reported protocols. Relevance of data is limited due to information having no intrinsic judgment or known reference for comparison. The data may be a reflection of a specific localized condition and may not be representative of the water body. This type of information may be considered as general background information, but it is not of sufficient rigor and relevance for listing decisions or regulatory actions.

Tier I data are data with the highest rigor and relevance requirements and are the only data used to make beneficial use support assessments for Idaho’s Integrated Report, to determine numeric water quality criteria exceedances, and for analysis in subbasin assessments and TMDLs. Tier I data are collected by professional scientists or professionally trained technicians with more than 30 hours of supervised training. Data are collected and analyzed under a monitoring plan with quality assurance/quality control objectives, and sample analysis is done by an EPA-certified laboratory or a professional taxonomist. To be considered relevant, Tier I data must be less than 5 years old and must be collected at multiple times and locations or collected from a representative location identified on a map or with GIS.

DEQ collects Pend Oreille River samples following a quality assurance project plan (QAPP). When DEQ collects samples representative of the Pend Oreille River, we go to a station within the thalweg and anchor our "clean" boat. We measure Secchi depth, total depth, vertical temperature profile, and dissolved oxygen profile. From these measures, we determine whether the station is stratified or isothermal and how many samples at what depths should be taken to be representative. Samples are taken with a vertical Van Dorne–type sampler, and composite samples (i.e., isothermal and epilimnion) are homogenized in a churn splitter. TP samples are placed in 250 milliliter (mL) HDPE sample bottles provided by a certified laboratory. Each sample is preserved with 1.25 mL of concentrated sulfuric acid (H_2SO_4), cooled to 2 ºC with loose ice, and kept out of the light. Trip blanks and a minimum of 10% field duplicates are taken at each sampling event. Samples are submitted with a chain-of-custody record, and method SM 4500-P-E (low level, MDL 0.0019, LRL 0.0020) is requested for analysis. Upon receipt of data from the laboratory, blanks and field duplicates are evaluated and data outside QAPP data quality objectives are handled according to QAPP.

It is inappropriate to compare data collected from the Pend Oreille River with the targets set in the *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho* (DEQ 2002). Furthermore, analysis of DEQ's 2009 water quality data determined that the current TP loads in the Pend Oreille River are in equilibrium with plant and algae uptake even though the TP loads defined in the TMDL as protective of beneficial uses are lower. Details of this analysis are provided in Attachment A. Idaho's water quality standards do not have a numeric water quality criterion; rather, the nutrient narrative standard states that "Surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses" (IDAPA 58.01.02.200.06). There is no indication that the samples collected by Lake Pend Oreille Waterkeeper were correlated with any incidence of excessive visible slime and/or nuisance aquatic growth. Furthermore, the Lake Pend Oreille Waterkeeper samples were collected in November—outside the critical summer months when aquatic algae growth is of concern.

The statement by Lake Pend Oreille Waterkeeper that "Results indicate a further increasing trend of TP in the River" is unfounded, and there may be a misconception by Lake Pend Oreille Waterkeeper that trends are established without elimination of spatial and temporal variability. Trends in water quality data are established using a monitoring design consisting of a series of fixed monitoring stations monitored on a regular schedule—either monthly or seasonally—over several years. A trends analysis completed by the Tri-State Water Quality Council found a decreasing trend in TP in the Pend Oreille River between 1998 and 2007. DEQ analysis of the same data verified this decreasing trend, as well as a decreasing trend for the period of record of the data (1974–2009).

Comment: The presence of Milfoil in the Pend Oreille River demonstrates high levels of phosphorous. After five years of attempts by Bonner County and the Idaho State Department of Agriculture ("ISDA") to eradicate invasive Eurasian Watermilfoil from the River, using millions of dollars of taxpayer funds, it continues to be a problem. The ISDA reported at the October 2010 Bonner County Aquatic Invasive Species Task Force meeting that 2010 post-treatment observations indicated an "explosion" of growth of milfoil in the River. While it has not been determined whether the "explosion" is actually invasive Eurasian Watermilfoil or native milfoil, it is not debated that any type of weed growing in large dense patches is a nuisance and can be hazardous to recreational activity including swimming and boating.

It has been argued by proponents of TP being delisted that milfoil, as a noxious weed, cannot be used to indicate beneficial uses being impaired in the same way other natural aquatic plants can. Although the presence of milfoil does not unilaterally indicate that the River's TP levels are too high, milfoil is a biological indicator that demonstrates high levels of TP in the River. As an aquatic plant, milfoil feeds off of phosphorous in the water just as any other aquatic plant does.

The narrative qualities governing impairment of the River does not distinguish between noxious growths and other naturally occurring aquatic growths. These narrative criteria expresses that the surface waters of the state shall be "free from excess nutrients that can cause nuisance aquatic growths" and "oxygen-demanding materials in concentrations that would result in an anaerobic water condition" impairing designated beneficial uses. WQS § 200.06 – 07. Therefore, EPA and IDEQ should consider the impairment to the designated beneficial uses caused by milfoil in its decision to keep TP on the River's 303(d) list. [sic]

Response: DEQ shares your concern over the presence of Eurasian watermilfoil in the Pend Oreille Watershed. However, DEQ disagrees that milfoil is impairing beneficial uses in the Pend Oreille River. While there is documentation as early as the 1980s on Eurasian watermilfoil problems in the Pend Oreille River (EPA 1993), recent information collected on aquatic plant communities in the Pend Oreille River suggests that while milfoil is problematic in localized areas in the river, there is still good diversity of native plant communities within the river. Furthermore, public use is not inhibited, nor are beneficial uses as related to TP impaired in the Pend Oreille River. Details of our aquatic plant and algae investigation are described in Attachment A, section 5. In addition, dissolved oxygen concentrations monitored in targeted areas believed to be worst-case conditions for oxygen demand and plant growth were above 6 milligrams/liter—indicating aerobic conditions in these areas. Details of the dissolved oxygen monitoring are in Attachment A, sections 4.2 and 8.

There appears to be a misconception by Lake Pend Oreille Waterkeeper that there is a direct relationship between Eurasian watermilfoil growth and distribution and the concentration of total phosphorus (TP) in the water column. While localized spread occurs through root crowns and runners, the primary mechanism for intermediate and long-distance dispersal of this nuisance species into new habitat is through stem fragmentation through mechanical damage and dispersal via water current and recreational boat traffic (Smith and Barko 1990; Madsen and Smith 1997). Factors that influence growth and morphology of Eurasian watermilfoil include water clarity, water temperature, inorganic carbon levels, mineral nutrients, sediment texture, water alkalinity, water movements, ice scour, and desiccation and freezing (Smith and Barko 1990). Although enriched nutrient soils can increase milfoil growth, light and temperature are the major limiting factors for growth and distribution of this species (Barko et al. 1986).

Determining use impairment using biological indicators is based on rigorous research that results in quality biological criteria based on the premise that the biological community within a specific habitat will provide specific information regarding the quality of surface water (EPA 2002). DEQ is not aware of an accepted use of milfoil by the professional community as a biological indicator for water quality, nor are we aware of any research demonstrating that Eurasian watermilfoil's primary source of phosphorus is from the water column. Rather, as with most submersed aquatic macrophytes, it is widely accepted that milfoil's primary mode of phosphorus uptake is from sediment by roots—even in flowing-water systems (Barko and Smart 1981; Barko et al. 1986; Carignan 1980, 1985).

Comment: We request that IDEQ considers all TP monitoring over the last decade when evaluating whether to delist the River. IDEQ's monitoring from last year provides insufficient data to support their decision to delist TP. The monitoring results from the summer of 2009 reflect only a snapshot of that year. This is inadequate because of the variability of water levels and weather from year to year. The levels of TP in the River fluctuate based on an innumerable amount of factors such as farming activities, fertilization, rainfall, snowpack and temperature, and relying on one year's sampling to delist a water body that was just listed the year before is an arbitrary and capricious decision that is not supported by the evidence.

IDEQ is proposing to delist TP from the 303(d) list without considering previous monitoring findings, and more importantly, evidence from the summer of 2010. As previously mentioned, evidence obtained during the summer of 2010 demonstrates that the designated beneficial uses of the River are impaired due to excess levels of TP. Although IDEQ has not considered such findings, IDEQ must consider "at a minimum all existing and readily available water quality-related data and information." 40 C.F.R. § 130.7(5). Additionally, we request that IDEQ take into account TSWQC's monitoring reports produced in 2005 that provided the basis for the River's initial listing of TP impairment. The conditions since the report are as bad or worse than 2005, and demonstrate that the River is still impaired for TP.

Response: The *Water Body Assessment Guidance, Second Edition* (WBAG II) describes DEQ's methods for evaluating data and determining beneficial use support of Idaho streams and rivers (Grafe et al. 2002). While DEQ must consider "all existing and readily available data from other sources," we are required to evaluate data that is 5 years old or newer (Grafe et al. 2002)). DEQ has made a thorough evaluation of all data available within the last 5 years to determine the proposed listing status of the Pend Oreille River. This effort included an evaluation of the 2003–2004 data collected by the Tri-State Water Quality Council (TSWQC), 2009 data collected by DEQ, an aquatic plant study conducted in 2007 by Mississippi State University in the Pend Oreille River in Idaho, and data collected by Washington Department of Ecology downstream of the Idaho/Washington border at Newport, Washington. As detailed in Attachment A, results of this evaluation of all existing and readily available data suggests the following: 1) there is a decreasing trend of total phosphorus (TP) in the river over time(i.e., TP conditions are getting better with time, not worse); 2) there is evidence that the Pend Oreille River system is assimilating TP at its current concentrations and the lentic targets in the *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho* (DEQ 2002) are inappropriate; 3) the native aquatic plant community is adequate to sustain the structure and function of the aquatic littoral ecosystem; and 4) beneficial uses as related to TP are not impaired.

The 2010 evidence submitted by Lake Pend Oreille Waterkeeper was not included in our evaluation of data in determining beneficial use support of the Pend Oreille River. The pictures submitted were from receding water areas outside the river channel—conditions not representative of the Pend Oreille River assessment unit—and the TP data collected lacked the rigor and relevance necessary to make beneficial use support decisions for Idaho's Integrated Report.

Comment: Currently, IDEQ's criterion for nutrients is solely a narrative criteria. Narrative criteria are statements that protect against impairment of beneficial uses by pollutants. Narrative criteria are employed for pollutants for which numeric criteria are difficult to specify, such as color and odor, or where natural occurrence and variability makes general limits impractical, such as with TP.

The decision to delist the River is incorrectly based on numeric findings rather than narrative findings required in WQS § 200. This subsection provides general water quality criteria applying to all surface waters of the state, in addition to the water quality criteria set forth for specifically designated waters. In the event a waterbody fails to meet this standard, the waterbody should be designated as impaired, because the pollutant diminishes its beneficial use.

IDEQ appears to base its proposal to delist the River almost exclusively on the numeric value of 9 µg/l. This value was established in the Pend Oreille Nearshore TMDL to reflect the character of waterbodies in the greater northern panhandle area. The numeric value is not waterbody specific, it was decided based on the area at large. The numeric value of 9 µg/l in and of itself is not contested. It is the application of this numeric criterion in IDEQ's decision to delist TP from the River where only narrative standards are to be used. As explained above, IDEQ must rely on all available information, including all the samples and photographs submitted in this comment letter. 40 C.F.R. § 130.7(5).

The numeric standard fails to reflect visible TP problems arising out of nuisance aquatic plant growths. Therefore, IDEQ must focus on the narrative standard while only taking into consideration numeric standards as supplemental in the absence of visible growths. To rely on a numeric standard as the basis for delisting, when the narrative standard demonstrates an obvious impairment, is an arbitrary and capricious decision.[sic]

Response: The *Water Body Assessment Guidance, Second Edition* (WBAG II) states that in the absence of numeric criteria, substantiated best professional judgment must be used to determine a violation of the narrative standard (Grafe et al. 2002). In so doing, the assessment must prove there is a source of pollutant, a pathway, and a measurable adverse effect on a beneficial use. A tool for evaluating beneficial use impairments due to excess nutrients may include developing a numeric interpretation of nutrient narrative criteria. However, applying numeric interpretations of narrative criteria during critical summer months should be coupled with any observations of visible slime/algae growth in the river while assessing beneficial use impairment.

The original listing of the Pend Oreille River for total phosphorus (TP) was based on a comparison of data collected in 2003–2004 with a numeric interpretation of Idaho's narrative nutrient standard for the nearshore waters of Pend Oreille Lake. However, the targets identified in the *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho* (DEQ 2002) were not coupled with observations of visible algae growth to evaluate for impact on designated beneficial uses, particularly in the lotic waters of Pend Oreille River. Although the original listing was based on our best professional judgment at the time, it did not make the necessary link between TP concentrations in the river and beneficial use impairment in the river.

Lake Pend Oreille Waterkeeper's statement that "IDEQ appears to base its proposal to delist the River almost exclusively on the numeric value of 9 µg/L" is false. Comparison to TMDL targets was only a starting place. Since the original listing, DEQ has conducted a multipronged approach to evaluate the existence of a correlation between TP concentration and

	beneficial use impairment. This effort included an evaluation of the relevance of the Pend Oreille Lake nearshore nutrient TMDL TP target to TP concentrations in the Pend Oreille River, an analysis of historical dissolved oxygen concentrations in the river, an analysis of recent data on native/invasive plant communities in the river, and a correlation of quantities of visible slime growth with TP concentrations in the river. Results of this evaluation indicate there is evidence that the Pend Oreille River system is at equilibrium between TP concentrations and plant and algae communities. Details of this analysis are provided in Attachment A. In addition, although invasive plant species exist in the Pend Oreille River, there is excellent diversity and abundance of native plants in the Pend Oreille River ecosystem adequate to sustain the structure and function of an aquatic littoral ecosystem (Madsen and Wersal 2008).
Comment:	EPA and the State of Idaho have an array of narrative standards established upon which they should rely to find that levels of TP in the River exceed levels necessary for their beneficial use. Using a numeric limit of 9 µg/l as a benchmark figure for TP violations, IDEQ during the summer of 2009 performed new TP testing using a "new assessment method" for which they unilaterally found the River would support the designated beneficial uses. IDEQ's 2009 Monitoring Results show that most test results for TP report at levels within 2 µg/l of 9 µg/l. Defending the findings of TP which were over the 9 µg/l limit, IDEQ explained that numeric findings of TP in amounts below 70 µg/l are unreliable and inconsistent. Using this logic, it can conversely be inferred that IDEQ's numeric findings of TP under 9 µg/l are likewise not reliable. It is due to this inherent difficulty in depending on numeric values of TP that the beneficial uses can only be determined using narrative criteria, when the limit is so low. We therefore request that IDEQ and EPA determine only the narrative criteria in their decision to keep TP on the River's 303(d) list.[sic]
Response:	DEQ is concerned with the reliability and repeatability of total phosphorus (TP) laboratory analysis results when detection and report limits are approached. DEQ did not employ a "new assessment method" for TP analysis in 2009. In the 2010 Integrated Report, the reason for delisting the river was selected from a standardized database list, and it simply means the delisting is based upon a new assessment of all existing and readily available data. Standard Method SM 4500-P-E (low level, MDL 0.0019, LRL 0.0020) was used in 2009. At a public meeting, DEQ explained that analysis methods were more reliable and repeatable at higher levels, such as 70 micrograms per liter, and that reliability and repeatability becomes most problematic when approaching zero. We agree that narrative evaluation is important when making an assessment call, and we have found through narrative evaluation that beneficial uses as related to TP are not impaired.

Comment #42

Assessment Unit:	ID17010216PN002_08
Water Body:	Pend Oreille River-Pend Oreille Lake to Priest River
Commenter:	City of Sandpoint Public Works Director
Comment:	We support the delisting of Pend Oreille River for total phosphorus. Additionally, we are supportive of continued monitoring of the Pend Oreille River for nutrients.
Response:	Thank you for your comments.

Comment #43

Assessment Units:	ID17010214PN001_08 ID17010214PN002_08 ID17010216PN002_08
Water Body:	Pend Oreille River
Commenter:	Kalispel Tribe of Indians
Comment:	The delisting of the Pend Oreille River for total phosphorus is premature based on 2009 water quality sampling performed when the river was experiencing better water quality than normal due to higher river flows and cooler temperatures. The initial 2005 listing was initiated based on data that was more characteristic of critical conditions which should be used to decide if the river should be 303(d) listed for adverse impacts from elevated phosphorus above those needed to preserve aesthetic and biological integrity of the Pend Oreille River downstream. Sampling during a critical low-flow year should be performed to confirm that in fact the river is not impaired by nutrients for most years.
Response:	DEQ maintains that the Pend Oreille River was experiencing representative water quality in 2009 and was not influenced by significantly higher river flows and cooler temperatures. An analysis of hydrologic and water quality conditions in 2009 compared to previous years indicates that flow and water quality conditions were clearly within the range of normal. Details of this analysis are provided in Attachment A, section 6. From this analysis, DEQ believes there is enough evidence to demonstrate that beneficial uses are currently supported in the Pend Oreille River. Critical low-flow concepts are typically considered in the development of total maximum daily loads (TMDLs) when dealing with margin of safety or with permitting. Idaho water quality standards do not require monitoring during critical low-flow years for assessment of beneficial use support. DEQ will continue to evaluate and assess Pend Oreille River in the future. Results from the hydrologic analysis indicated that flow in June 2009 likely led to a general perception that 2009 was a high water year. In 2009, snowpack was at 95% of average for the Pend Oreille River watershed. By June 1, Pend Oreille Lake was 86% of summer pool. Due to moderate spring temperatures and above-average precipitation, it was anticipated that snowmelt would be prolonged and streamflow would extend into the summer months. Temperatures into the 80s (°F) in late May and the beginning of June, followed by almost an inch of rain, caused a quicker-than-expected snowmelt and a sharp jump in streamflow in early June. This flow increase was observed on the Pend Oreille River at Newport, Washington, as well, where a 10,000 cubic foot per second (cfs) increase occurred between May 23 and June 3. This increase may be the basis of the perception that 2009 was a high water year. However, in the following months, temperatures were in the 80s and 90s and there were few isolated rain events that translated to a small increase in flow in the Pend Oreille River at Newport. As such, a normal decline in flow was observed in the Pend Oreille River compared with other years of concern. For the whole year, flows in the Pend Oreille River at Newport were below the 50th percentile compared to flows for the period of record at that site. A second type of analysis looked at the distribution of mean monthly flows in the Pend Oreille River during the years total phosphorus (TP) data was collected (2003–2005 and 2009) as they relate to mean monthly flows for the period of record.

DEQ used the mean monthly flows recorded at the U.S. Geological Survey gage at Newport, Washington, for the period of record (1903–2009). Mean monthly flows from June through September in 2004–2005 and 2009 were not indicative of a higher than average flow year; flows were within the 2nd/3rd quartile of mean monthly flows for the period of record. Only flows in 2003 could be considered unique and more characteristic of critical conditions because they fell within the 1st quartile of mean monthly flows for the period of record. TP concentrations in 2003 during the critical summer months were low and consistent with concentrations seen in other years (below 0.012 milligrams/liter).

Comment #44

Assessment Unit:	
Water Body:	Blackfoot River
Commenter:	Idaho Mining Association
Comment:	The Blackfoot River should be moved from Category 5 to Category 4b for selenium.
Response:	DEQ appreciates your interest in improving water quality in the upper Blackfoot River. Your proposal for using Category 4b of the Integrated Report to address selenium exceedances is a novel and worthwhile approach. After reviewing your Category 4b petition we found some additional data and areas of detail that are needed to successfully address the six elements that are recommended by EPA when preparing a 4b justification. The following are EPA's six necessary elements:

1. Identification of segment and statement of problems causing the impairment
2. Description of pollution controls and demonstration of how they will achieve water quality standards
3. An estimate or projection of the time when water quality standards will be met
4. Schedule for implementing pollution controls
5. Monitoring plan for tracking effectiveness of the pollution controls
6. Commitment to revise pollution controls as necessary

During the review of the 4b petition, it was not always clear who the responsible party was for specific actions nor was it clear who is responsible for coordinating the entire 4b effort since a number of entities were mentioned in the petition. It appears that the Idaho Mining Association (IMA) is the responsible entity (on page 5-2 of the 4b petition), though DEQ is not entirely certain of this. One of the requirements for the 4b listing is showing that the applicable water quality criteria, in this case 5 parts per million selenium, will be achieved by the describe actions, not just reduced. Several control programs and documents are referenced in the petition, yet it is not entirely clear who the responsible party or regulatory agency is. For instance, the Comprehensive Environmental Response, Compensation, and Liability Act appears to be the controlling regulatory program, but which agency is responsible is less clear. Trend data are referenced but not displayed. A monitoring strategy was included, but a more detailed plan is required. The distinction between administrative orders and voluntary consent orders is not clear. The final document will need to go out for public comment before it can be submitted with the Integrated Report to EPA for review and approval. DEQ suggests using the 2012 Integrated Report as the vehicle

	for public comment, review, and approval. Lastly, EPA will ultimately have to approve the 4b justification. Once the document is in a more complete form, DEQ will work with IMA on discussions with EPA, with the aim of achieving a final approval.
Comment #45	
Assessment Units:	ID17010214PN001_08 ID17010214PN002_08 ID17010216PN002_08
Water Body:	Pend Oreille River
Commenter:	Kootenai Environmental Alliance
Comment:	We object to a de-listing based on a "new assessment method" not fully justified or ventilated through a public process. In particular, the de-listing of the Pend Oreille River appears to be unjustified procedurally and unjustified based on the data collected by a clearly-deficient new method.
Response:	The delisting of the Pend Oreille River was conducted in accordance to guidance set forth in Idaho's *Water Body Assessment Guidance, Second Edition* (WBAGII) and Idaho water quality standards. The WBAGII describes DEQ's methods for evaluating chemical, physical, and biological data to determine beneficial use support of Idaho's streams and rivers (Grafe et al. 2002). In the 2010 Integrated Report, the reason for delisting the river was selected from a standardized EPA database list, and it simply means that the delisting is based upon a new assessment of all existing and readily available data. WBAGII states that in the absence of numeric criteria, substantiated best professional judgment must be used to determine a violation of the narrative standard. In so doing, the assessment must prove there is a source of pollution, a pathway, and a measurable adverse effect on a beneficial use. A conventional tool for evaluation of beneficial use impairments due to excess nutrients may include developing a numeric interpretation of nutrient narrative criteria. However, application of numeric interpretations of narrative criteria during critical summer months should be coupled with any observations of visible slime/algae growth in the river while assessing beneficial use impairment. Although it was based upon the best professional judgment at the time, the assessment for the 2008 Integrated Report was based upon a comparison with a numeric interpretation of Idaho's narrative standard. It did not make the necessary link between total phosphorus concentrations and beneficial use support. The assessment for the 2010 Integrated Report included an analysis coupling total phosphorus concentrations with beneficial use support. Results of this assessment indicate that beneficial uses are supported at current phosphorus concentrations within the river. Details of this analysis are provided in Attachment A.
Comment #46	
Assessment Unit:	ID17010303PN020_03
Water Body:	Fourth of July Creek
Commenter:	Kootenai Environmental Alliance

Comment: The delisting of this AU for sediment appears to be based on only one measurement with no indication why the original listing was incorrect.

Response: Fourth of July Creek was originally listed for sediment in the 1990s when the addition of traction sand to the highway resulted in excessive sediment and impairment of beneficial uses in Fourth of July Creek near Interstate-90. Justification for delisting sediment is based on modeling done in 1999 under the *Coeur d'Alene Lake and River (17010303) Subbasin Assessment and Proposed Total Maximum Daily Loads* (DEQ 1999), channel substrate and stream bank data collected in 2006 during Beneficial Use Reconnaissance Program monitoring, Idaho Department of Lands Cumulative Watershed Effects (CWE) data, and site visits conducted in 2009–2010.

Sediment loading estimates completed under the *Coeur d'Alene Lake and River (17010303) Subbasin Assessment and Proposed Total Maximum Daily Loads* were based primarily on sources of sediment from land-use types and road characteristics, and those estimates assumed complete delivery of sediment to the stream channel. The total maximum daily load (TMDL) prescribed an interim load capacity for each subwatershed equal to natural background conditions, and the TMDL analysis determined that a TMDL for sediment was not needed on Fourth of July Creek because excessive sedimentation was not found. Sediment loading in the watershed was found to be at or near background conditions.

In 1999, a CWE assessment was conducted by personnel from the Idaho Department of Lands. The CWE process evaluates the extent to which forest practices impact sediment delivery to the stream and recommends management actions based on the evaluation. Results of the CWE analysis gave an overall rating of sediment delivery to Fourth of July Creek as low. No CWE data have been collected since this time.

DEQ collected water quality monitoring data on Fourth of July Creek in accordance with BURP protocol in July 2006. Based on scores from this monitoring data, this assessment unit was not fully supporting its beneficial uses. However, the biological data collected on this day were questionable because flow was 0.16 cubic feet per second. At such a low flow, the Hess sampler is not designed to collect macroinvertebrates, and electrofishing isn't done. Wolman pebble counts collected during this monitoring event demonstrated percent fines were 4.78%—well below the 20% fines threshold that reduces embryo survival and fry emergence. In addition, greater than 95% of stream banks were observed to be stable.

DEQ conducted several field visits in 2009–2010 along the entire length of this reach. The visits were done at a number of accessible reaches along the creek during different times of the year to observe the channel during high flow, after high flow, and during low flow. On each visit, visual observations were made to determine channel condition with respect to sediment transport and deposition and aquatic life use support. The survey found that the study reaches, despite being highly channelized due to their proximity to Interstate-90, were densely foliated with good stream bank stability, no channel embeddedness, and lots of habitat complexity. There were very few areas of significant bank erosion as evidenced by bare, vertical stream banks and/or sod-root overhangs. Mass wasting was also not evident at these sites. On the lower-gradient reaches of the creek, some mid-stream depositional features were present after a very high flow event in January 2011. However, these features were not at an elevation within the channel that would redirect flow towards the banks during future high flow events; therefore, there is no concern for increased erosion of the channel banks at these sites.

This reach is a highly flow-altered system. The majority of this assessment unit is channelized due to its proximity to

	Interstate-90. In addition, a series of flood control structures are in place at the mouth of the creek. Although flow alteration presents its own complexities to the system, data analysis and site observations have provided weight of evidence that aquatic life use on Fourth of July Creek is not impaired by sediment. DEQ stands by the decision to delist sediment from Category 5 of the Integrated Report. Data received from the U.S. Forest Service have demonstrated the impairment is due to temperature.
Comment #47	
Assessment Unit:	ID17010303PN025_02
Water Body:	Thompson Creek
Commenter:	Kootenai Environmental Alliance
Comment:	We understand the logical basis for delisting this AU for physical substrate habitat alterations based on comparisons to Carlin Creek, but we are not convinced that the report has sufficient data on this waterbody to support the delisting. We suggest that this AU remain in Category 4c until more actual data can be obtained.
Response:	Data analysis and site observations were performed for weight of evidence that Thompson Creek is currently fully supporting the aquatic life use. In addition to the modeling comparison with Carlin Creek, which will not be discussed in this response, DEQ conducted a site visit of Thompson Creek to evaluate whether sediment is impairing beneficial uses. Portions of the stream that were evaluated were those most likely to be impaired due to removal of riparian vegetation or impacted by other land use activities. It was observed that cattle were excluded from the stream (except for stream crossing sites), and neither over-grazing nor bank trampling was observed. Most portions of the stream were fenced to exclude cattle access and to restrict public access. Riparian vegetation was at or near full potential in 80–90% of the area observed. Where woody vegetation was lacking, grasses, sedges and forbs dominated. Areas of stream bank lacking vegetative cover resulting in exposed soil were not observed. An evaluation of the stream erosive factors following the method outlined in Rosgen (2006) determined that current conditions demonstrate a low bank erosion hazard index and near-bank stress index. No large depositional features were noted and the substrate was not embedded. These condition ratings support findings that sedimentation within the watershed is not impacting beneficial uses. Based on this field visit, which included an evaluation of the stream erosive factors, modeling, and the comparison analysis to Carlin Creek, DEQ believes our analysis and field observations are sufficient for reinstating the full support status of Thompson Creek.
Comment #48	
Assessment Unit:	
Water Body:	
Commenter:	Kootenai Environmental Alliance

Comment: We are not convinced by the argument presented in the Temperature section that would allow "Inferring Compliance When Partial Data Shows More Than 10% of Days Above Criteria." We request that the final Integrated Report demonstrate where such an inference would be acceptable under the Clean Water Act.

Response: The inference in question is part of DEQ's interpretation of section 054.03 of Idaho's water quality standards. That section allows for data showing a healthy biological community to override temperature criteria exceedance occurring at a frequency up to 10%. DEQ policy for application of this interpretation to cold water aquatic life and salmonid spawning restricts determination of frequency of exceedance for temperature to critical time periods (e.g., summer months for cold water aquatic life). There is nothing in the Clean Water Act that speaks to this level of detail, but this standard has been approved by EPA. The federal rules implementing the Clean Water Act simply require that the state provide "A description of the methodology used to develop the 303(d) list." DEQ has done that.

Comment #49

Assessment Unit:

Water Body:

Commenter: Kootenai Environmental Alliance

Comment: We are deeply concerned that a vast proportion of Idaho's lakes, rivers, and streams are going unmonitored. It is unclear in the Integrated Report what proportion of Category 3 waters has ever been monitored. The Integrated Report should include a schedule of when the waters in Category 3 will be monitored.

Response: Thank you for your comment. DEQ's first priority is completing monitoring to support total maximum daily loads (TMDLs) on the 2002 TMDL Settlement Agreement. Our second priority is monitoring all state waters as part of our ambient monitoring effort. Given the large number of assessments units (approximately 5,747), we're only capable of doing so many in any one year. Many of the waters remaining in Category 3 are there for the following reasons: 1) they had no flow when visited by DEQ; 2) access to the monitoring site was denied; or 3) the monitoring site is inaccessible. These limitations, coupled with reduced budgets the last couple of years, have drastically reduced our ability to meet this priority. DEQ has attempted to deal with these limitations by doing a probabilistic/random approach to our ambient waters, whereby we sample a few representative waters and apply the results to similar waters in that group. This approach allows us to make a determination of the current conditions of all state waters for the Integrated Report.

Comment #50

Assessment Unit:

Water Body:

Commenter: Kootenai Environmental Alliance

Comment: Due to the lack of water quality monitoring, some of the charts, tables, and narrative within the Statewide Statistical Surveys section of the Integrated Report can be misleading. When addressing what percentage of Idaho's waters are "good" or "fair" DEQ should explain that those percentages are of the miniscule percentage of target waters actually being monitored.

Response: DEQ disagrees that the referenced section is based on a lack of water quality monitoring, but rather on a selective approach based on the probabilistic sampling survey. A probabilistic sampling survey is made up of several elements: the target population, sample frame, sampled population, and evaluated sites.

The surveys were designed specifically to address our inability to monitor every water body throughout the state. This survey design is analogous to political polling or medical studies, where results from a proportion of the population can be used to make inferences about the population at large. Sample sites were selected randomly, in order to represent a proportion of the total target population (i.e., the total miles of major rivers and streams in Idaho). By strict adherence to the survey design, DEQ is able to extrapolate the results from relatively few, representative monitoring locations to a greater population at large; therefore, these results are for the overall percentage of Idaho's major rivers and streams, as defined by the target populations.

Comment #51

Assessment Unit: ID17050114SW006_02

Water Body: Mason Creek

Commenter: EPA Region 10

Comment: DEQ has proposed to delist Mason Creek for unknown. DEQ contends that Mason Creek was listed for unknown based on suspected nutrient impairment, however based on review found that although phosphorus levels may exceed targets set in the Snake River Hells Canyon TMDL, Mason Creek is not impaired. DEQ goes on further to cite data from USGS and ISDA that sediment and bacteria exceed criteria and TMDL targets and notes that BURP scores, which include fish and macro invertebrate data, are low and resulted in a determination that aquatic life and recreation beneficial uses are not supported.

EPA has reviewed DEQ's documentation and justification for delisting and finds that the data indicates that nutrients in Mason Creek impair beneficial use support in the creek, contribute to the impairment of the beneficial uses of the Snake River and Brownlee Reservoir and exceed EPA criteria recommendations for nutrients. Based on this, it seems that the existing and readily available information is not consistent with the proposed delisting. Therefore, EPA instead recommends that Mason Creek's unknown 303(d) listing be changed to a 303(d) listing for nutrients.

In considering DEQ' s delisting rationale, EPA reviewed Idaho's water quality standards that address nutrients and EPA's disapproval documentation of Idaho's removal of the Lower Boise River in 2008. Idaho Administrative Code (IDAP A 58.01.02-200.05, 06, 07) outlines the following water quality criteria that pertain to nutrients:

05. Floating, Suspended or Submerged Matter. Surface waters of the state shall be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses. This matter does not include suspended sediment produced as a result of nonpoint source activities. (8-24-94)

06. Excess Nutrients. Surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses. (8-24-94)

07. Oxygen-Demanding Materials. Surface waters of the state shall be free from oxygen demanding materials in concentrations that would result in an anaerobic water condition. (7-193)

In EPA's Rationale for adding Lower Boise River onto Idaho's 2008 303(d) list, EPA lays out an appropriate method for the interpretation of narrative nutrient criteria that includes appropriate indicators for interpreting narrative standards for nutrients, EPA's numeric interpretation of Idaho's narrative criteria and documentation of Idaho's interpretation of its narrative standard for nutrients. Many states have narrative criteria for nutrients that must be interpreted to determine if beneficial uses are supported. While Idaho has not developed specific guidance to interpret their criteria, they have developed the River Macroinvertebrate Index (IDEQ, 2002) and use other parameters (DO, chlorophyll a, etc) and the narrative criteria above, to determine if nutrient problems are impairing beneficial use support. Based on EPA's review of the Lower Boise River 5-year Assessment and TMDL Review, phosphorus levels in Mason Creek from 1998-2008 ranged from 0.2 mg/L to 0.61 mg/L TP, averaging 0.33 mg/L. These levels consistently and significantly exceed EPA's 304(a) Gold Book criteria of 0.1 mg/L total phosphorus (EPA, 1986) as well as EPA's more recent 304(a) ecoregional criteria of 0.043 mg/L, thus indicating impairment. It does not appear that DEQ considered total phosphorus or EPA's 304(a) Gold Book criteria when evaluating Mason Creek for nutrient impairment.

In summary, EPA believes Mason Creek is impaired for nutrients as phosphorus concentrations are well above EPA recommended nutrient levels and above targets set to achieve water quality standards in downstream waters (per Snake River Hells Canyon TMDL). We also believe it is very likely that excess sediment in Mason Creek masks additional effects of high nutrient concentrations. Based on the data and information presented, EPA recommends that Mason Creek's unknown 303(d) listing be changed to a 303(d) listing for nutrients.

Response: As EPA notes, a number of targets have been cited that suggest impairment to beneficial uses due to total phosphorus (TP). These include exceeding the *Snake River- Hells Canyon Total Maximum Daily Load (TMDL)* (DEQ and ODEQ 2004) target of 0.07 milligrams per liter (mg/L), the EPA Gold Book TP criteria of 0.1 mg/L, and the EPA Ecoregion reference TP target of 0.043 mg/L. However, as EPA notes, DEQ’s standard for nutrients, including TP, is narrative rather than numeric. In order for DEQ to make a more complete and informed assessment of the impairment, water quality monitoring data need to directly address the narrative standard (§58.01.02.200.05, .200.06, and .200.07). As EPA notes, Mason Creek suffers from a number of pollutants, any of which by themselves or in combination could be the offending pollutant for the impairment observed in the water quality monitoring data. Additional benthic chlorophyll-a data, ash free dry mass data, aquatic macrophyte data, and/or quantitative or qualitative photos of algae would be most helpful in sorting this out. Without this support documentation, DEQ is not confident in assigning impairment to TP. As such, DEQ will re-list the pollutant as cause unknown with suspected nutrient impairment in the cause comments.

Comment #52

Assessment Unit: ID17050114SW017_06

Water Body: Sand Hollow Creek

Commenter: EPA Region 10

Comment: DEQ has proposed to delist Sand Hollow Creek for unknown. DEQ contends that Sand Hollow Creek was listed for unknown based on suspected nutrient impairment, however based on review found that although phosphorus levels may exceed targets set in the Snake River Hells Canyon TMDL, Sand Hollow Creek is not impaired.

EPA has reviewed DEQ's documentation and justification for delisting and finds that the data indicate that nutrients in Sand Hollow Creek impair beneficial use support in the creek, contribute to the impairment of the beneficial uses of the Snake River and Brownlee Reservoir and exceed EPA criteria recommendations for nutrients. Based on this, it seems that the existing and readily available information is not consistent with the proposed delisting. Therefore, EPA instead recommends that Sand Hollow's unknown 303(d) listing be changed to a 303(d) listing for nutrients.

In considering DEQ's delisting rationale, EPA reviewed Idaho's water quality standards that address nutrients and EPA's disapproval documentation of Idaho's removal of the Lower Boise River in 2008. Idaho Administrative Code (IDAPA 58.01.02-200.05, 06, 07) outlines the following water quality criteria that pertain to nutrients:

05. Floating, Suspended or Submerged Matter. Surface waters of the state shall be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses. This matter does not include suspended sediment produced as a result of non point source activities. (8-24-94)

06. Excess Nutrients. Surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses. (8-24-94)

07. Oxygen-Demanding Materials. Surface waters of the state shall be free from oxygen-demanding materials in concentrations that would result in an anaerobic water condition. (7-193)

In EPA's Rationale for adding Lower Boise River onto Idaho's 2008 303(d) list, EPA lays out an appropriate method for the interpretation of narrative nutrient criteria that includes appropriate indicators for interpreting narrative standards for nutrients, EPA's numeric interpretation of Idaho's narrative criteria and documentation of Idaho's interpretation of its narrative standard for nutrients. Many states have narrative criteria for nutrients that must be interpreted to determine if beneficial uses are supported. While Idaho has not developed specific guidance to interpret their criteria, they have developed the River Macroinvertebrate Index (IDEQ, 2002) and use other parameters (DO, chlorophyll a, etc) and the narrative criteria above, to determine if nutrient problems are impairing beneficial use support. Based on EPA's review of the data for Sand Hollow Creek from 1998 -2008 ranged from 0.22 mg/L to 0.56 mg/L TP, averaging 0.38 mg/L. These levels consistently and significantly exceed EPA's 304(a) Gold Book criteria of0.1 mg/L total phosphorus (EPA, 1986) as well as EPA's more recent 304(a) ecoregional criteria of0.043 mg/L, thus indicating impairment. It does not appear that IDEQ considered total phosphorus or EPA's 304(a) Gold Book criteria when evaluating Sand Hollow Creek for nutrient impairment.

In summary, EPA believes Sand Hollow Creek is impaired for nutrients as phosphorus concentrations are well above EPA

	recommended nutrient levels and above targets set to achieve water quality standards in downstream waters (per Snake River Hells Canyon TMDL). We also believe it is very likely that excess sediment in Sand Hollow Creek masks additional effects of high nutrient concentrations. Based on the data and information presented, EPA recommends that Sand Hollow Creek's unknown 303(d) listing be changed to a 303(d) listing for nutrients.
Response:	As EPA notes, a number of targets have been cited that suggest impairment to beneficial uses due to total phosphorus (TP). These include exceeding the *Snake River - Hells Canyon Total Maximum Daily Load (TMDL)* (DEQ and ODEQ 2004) target of 0.07 milligrams per liter (mg/L), the EPA Gold Book TP criteria of 0.1 mg/L, and the EPA Ecoregion reference TP target 0.043 mg/L. However, as EPA notes, DEQ's standard for nutrients, including TP, is narrative rather than numeric. In order for DEQ to make a more complete and informed assessment of the impairment, water quality monitoring data needs to speak directly to the narrative standard (§58.01.01.200.05, .200.06, and .200.07). As EPA notes, Sand Hollow Creek suffers from a number of pollutants, any of which by themselves or in combination could be the offending pollutant for the impairment observed in the water quality monitoring data. Additional benthic chlorophyll-a data, ash free dry mass data, aquatic macrophyte data, and/or quantitative or qualitative photos of algae would be most helpful in sorting this out. Without this support documentation, DEQ is not confident in assigning impairment to TP. As such, DEQ will re-list the pollutant as cause unknown with suspected nutrient impairment in the cause comments.

Comment #53

Assessment Units:	ID17050102SW022_02
	ID17050102SW022_03
Water Body:	Cougar Creek
Commenter:	EPA Region 10
Comment:	De-listing sediment because data and/or information lacking to determine water quality status: original basis for listing was incorrect: Cougar Creek was discussed in the Bruneau River Subbasin Assessment and TMDL. Cougar Creek was noted to be dry when sampling was attempted, however it was assessed based on downstream conditions. EPA supports the downstream evaluation as a potential indicator of determining use support for intermittent streams, however since DEQ does not have an assessment protocol for intermittent streams, we recommend that Cougar Creek remain in Category 5 for sediment until DEQ develops a protocol for assessing intermittent streams.
Response:	DEQ returned these assessment units to Category 5 for sediment, pending late-spring 2011 monitoring.

Comment #54

Assessment Units:	ID17050102SW025_02
	ID17050102SW025_03
Water Body:	Poison Creek
Commenter:	EPA Region 10

Comment:	De-listing sediment because data and/or information lacking to determine water quality status: original basis for listing was incorrect: Poison Creek was discussed in the Bruneau River Subbasin Assessment and TMDL. Poison Creek was noted to be dry when sampling was attempted, however it was assessed based on downstream conditions. EPA supports the downstream evaluation as a potential indicator of determining use support for intermittent streams, however since DEQ does not have an assessment protocol for intermittent streams, we recommend that Poison Creek remain in Category 5 for sediment until DEQ develops a protocol for assessing intermittent streams.
Response:	DEQ returned these assessment units to Category 5 for sediment, pending late-spring 2011 monitoring.

Comment #55

Assessment Unit:	ID17050102SW035_04
Water Body:	Buck Flat Draw
Commenter:	EPA Region 10
Comment:	De-listing temperature because data and/or information lacking to determine water quality status: original basis for listing was incorrect. An evaluation of whether the pollutant is impairing beneficial uses is still needed, beyond simply establishing that the stream is intermittent. Additionally, until DEQ develops an appropriate assessment tool for intermittent waters, this AU shall remain in Category 5 for temperature.
Response:	DEQ returned this assessment unit to Category 5 for temperature, pending late-spring 2011 monitoring.

Comment #56

Assessment Unit:	ID17060203SL011_02
Water Body:	Panther Creek
Commenter:	EPA Region 10
Comment:	The delisting rationale is very confusing and does not support a proposed delisting for copper.
Response:	Copper was erroneously listed for this assessment unit. This listing is an artifact of WQLS 2967 (Panther Creek-Blackbird Creek to Salmon River). Although mining has occurred in this watershed, these mining activities did not occur within the vicinity of these second-order drainages to Panther Creek. However, the 1998 Beneficial Use Reconnaissance Program data do suggest there is a biological impairment on this segment. Therefore, combined biota/habitat bioassessment has been added to the 2010 Integrated Report and copper has been delisted.

Comment #57

Assessment Unit:	ID17060203SL011_04
Water Body:	Panther Creek
Commenter:	EPA Region 10
Comment:	The delisting rationale is very confusing and does not support a proposed delisting for cause unknown.

Response:	Based on monitoring data submitted by EPA, Idaho Fish and Game, and the U.S. Forest Service, DEQ determined that the cause of the biological impairment was copper. Therefore, cause unknown has been delisted and copper has been added as the identified cause.
Comment #58	
Assessment Unit:	ID17060205SL028_02
Water Body:	Beaver Creek
Commenter:	EPA Region 10
Comment:	The delisting rationale is very confusing and does not support a proposed delisting for combined biota/habitat bioassessment.
Response:	Based on Beneficial Use Reconnaissance Program (BURP) data collected from two sites in 1997, this assessment unit received an average score of two (2) for each site. According to DEQ's *Water Body Assessment Guidance* (Grafe et al. 2002), an average score of greater than or equal to 2 is considered fully supporting. Therefore, based on the 1997 BURP data this assessment unit should never have been listed. DEQ recommends delisting combined biota/habitat bioassessment and moving this assessment unit to Category 2.
Comment #59	
Assessment Unit:	ID17050108SW013_02
Water Body:	Rock Creek above Triangle Reservoir-1st and 2nd order
Commenter:	EPA Region 10
Comment:	Simply establishing that the stream is intermittent is not good cause to de-list for sediment. Until DEQ develops an appropriate assessment tool for intermittent waters, this AU shall remain in Category 5 for sediment.
Response:	During the development of the *Jordon Creek Subbasin Assessment and Total Maximum Daily Load* (TMDL) (DEQ 2009), data collected in 2003 from a Beneficial Use Reconnaissance Program site (2003SBOIA010) located downstream of this 2nd-order segment showed the stream bank stability to be excellent, with 90% of the stream rated as covered and stable. Percent fines recorded in 2003 showed that 27% of the substrate consisted of material less than or equal to 2.5 millimeters in size. According to DEQ's *Guide to Selection of Sediment Targets for Use in Idaho TMDLs* (DEQ 2003a), most impairment is noted when percent fines of this size make up greater than 30% of the substrate. Periphyton samples collected in 2003 indicate only minor stress possibly associated with siltation. Furthermore, the stream macroinvertebrate index (SMI) "Condition Rating" from macroinvertebrate samples collected from two downstream sites in 1998, although collected outside of DEQ's index period, was a 3, and the 2003 site's SMI "Condition Rating" was a 2. According to DEQ's *Water Body Assessment Guidance*, these condition ratings indicate a healthy macroinvertebrate community (Grafe et al. 2002). Therefore, DEQ proposes to delist the assessment unit for sediment since impacts from sediment are not readily apparent.

Comment #60	
Assessment Unit:	ID17050114SW003_02
Water Body:	Indian Creek and Tributaries
Commenter:	EPA Region 10
Comment:	Simply establishing that the stream is intermittent is not good cause to de-list for sediment, fecal coliform and nutrient/eutrophication biological indicators. Until DEQ develops an appropriate assessment tool for intermittent waters, this AU shall remain in Category 5 for sediment, temperature and nutrient/eutrophication biological indicators.
Response:	DEQ returned this assessment unit to Category 5 for sediment, fecal coliform, and nutrient/eutrophication biological indicators, pending late-spring 2011 monitoring.
Comment #61	
Assessment Unit:	ID17050114SW003_03
Water Body:	Indian, North Indian and Sand Creek
Commenter:	EPA Region 10
Comment:	Simply establishing that the stream is intermittent is not good cause to de-list for sediment, temperature and nutrient/eutrophication biological indicators. Until DEQ develops an appropriate assessment tool for intermittent waters, this AU shall remain in Category 5 for sediment, temperature and nutrient/eutrophication biological indicators.
Response:	DEQ returned this assessment unit to Category 5 for sediment, temperature, and nutrient/eutrophication biological indicators, pending late-spring 2011 monitoring.
Comment #62	
Assessment Unit:	ID17050122SW017_02
Water Body:	Big Willow Creek
Commenter:	EPA Region 10
Comment:	Simply establishing that the stream is intermittent is not good cause to de-list for temperature. Until DEQ develops an appropriate assessment tool for intermittent waters, this AU shall remain in Category 5 for temperature.
Response:	DEQ agrees that establishing that a stream is intermittent is not good cause to delist and that more lines of evidence are necessary. However, it was discovered that second-order Big Willow Creek is captured in the *Big Willow Creek Assessment and Temperature Total Maximum Daily Load* (DEQ 2008a), approved July 1, 2008, as having a temperature total maximum daily load. DEQ has updated the Assessment Database and this AU-cause combination has been moved from Category 5 to Category 4a.
Comment #63	
Assessment Unit:	ID17050124SW002_02
Water Body:	Cove Creek

Commenter:	EPA Region 10
Comment:	Simply establishing that the stream is intermittent is not good cause to de-list for sediment. Until DEQ develops an appropriate assessment tool for intermittent waters, this AU shall remain in Category 5 for sediment.
Response:	DEQ returned this assessment unit to Category 5 for sediment, pending late-spring 2011 monitoring.

Comment #64

Assessment Unit:	ID17040205SK014_02
Water Body:	Crane Creek
Commenter:	EPA Region 10
Comment:	Simply establishing that the stream is intermittent is not good cause to de-list for temperature. Until DEQ develops an appropriate assessment tool for intermittent waters, this AU shall remain in Category 5 for temperature.
Response:	Temperature was listed in error. DEQ has no readily available continuous temperature data that suggest thermal loading is occurring. Therefore, DEQ stands by the decision to delist temperature due to a listing error.

Comment #65

Assessment Units:	ID17060201SL131_04 ID17060201SL132_02 ID17060201SL132_03 ID17060201SL132_04
Water Body:	Warm Springs Creek
Commenter:	EPA Region 10
Comment:	EPA provided the following comments on Warm Springs Creek during review of the Upper Salmon TMDL: *Statements in the third paragraph, pertaining to the need to develop a TMDL for ditches, are not entirely accurate. If a waterbody does not meet the definition of a water of the U.S. (See 40 CFR 122.2), then the Clean Water Act and water quality standards do not apply to the water, and therefore TMDLs are not required. However, if Warm Springs Creek meets the definition of a water of the U.S., then a TMDL would be required since it is included on the Idaho 303(d) list, unless it can be demonstrated that it complies with water quality standards. If there is a factual basis to conclude that Warm Springs Creek is not a water of the U.S., we recommend that you provide documentation in the SBA, and subsequently propose delisting the waterbody. If Warm Springs Creek is a water of the U.S., then options you might want consider include proceeding to write a TMDL, or in recognition that a coldwater aquatic life beneficial use and criteria may not be appropriate, defer TMDL development (e.g. TMDL schedule change) until such time as beneficial uses and criteria are revised.* It should also be noted that the flows cited in the Upper Salmon Subbasin TMDL for the two sampling locations in Warm Springs Creek are 1.6 cfs and 3.5, both above the threshold for evaluation.

Response:	This segment (WQLS 3019) was first listed for sediment and nutrient on the 1994 §303(d) list, which was promulgated by EPA as part of the first total maximum daily load lawsuit. EPA listed this water solely because it was listed in Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment of DEQ's 1992 Water Quality Status Report. Although Warm Springs Creek was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, or chemical). Suspected sediment and nutrient impairments were a case of best professional judgment. In 1995, Warm Springs Creek was monitored and determined not to be supporting its beneficial uses due to a stream macroinvertebrate index (SMI) score below the minimum threshold. However, this index should not have been applied to a "warm spring systems" or a dewatered stream. The SMI was developed based on community composition and function typical of an expected reference condition. Reference conditions describe persistent aquatic habitats that allow full development of aquatic communities. Temporary waters will never have similar composition and function as perennial waters. Additionally, this segment was monitored on June 26, 1995, which is outside of DEQ's index period of July through September. Furthermore, this water body is entirely diverted from its natural stream channel into a constructed channel for agriculture and for a hydroelectric project that leave no water in the original natural stream course. Even though there was adequate flow, because Warm Springs Creek is a "spring" system, DEQ's monitoring data and assessment methods should not have been applied. Given the lack of listing history to explain what data was used, if any, and the fact that Warm Springs Creek is a spring rather than a ground water/snow creek, DEQ proposes to delist cause unknown (nutrients), add low flow alterations in Category 4c, and relist sediment in Category 5 until additional water quality monitoring data can be collected to conclusively demonstrate that the aquatic life beneficial use is not impaired by sediment.
Comment #66	
Assessment Unit:	ID17010104PN004_02
Water Body:	Blue Joe Creek
Commenter:	EPA Region 10
Comment:	DEQ reports that the pH data used to recommend delisting this water was all collected on a single day and showed compliance with criteria at 3 of 4 locations. EPA has concerns that the pH data measurement was made in the lab and not the field where measurement needs to be measured to be considered accurate. Due to the minimal amount of data and questionable data quality, EPA would not recommend delisting Blue Joe Creek for pH.
Response:	DEQ agrees. DEQ returned this assessment unit back to Category 5 for pH until DEQ can re-evaluate the water body to ensure compliance with Idaho's water quality standards.
Comment #67	
Assessment Units:	ID17010214PN001_08 ID17010214PN002_08 ID17010216PN002_08
Water Body:	Pend Oreille River

Commenter:	EPA Region 10
Comment:	The proposed delisting for total phosphorus is based on one year's good data. Previous years have shown problems and DEQ staff believed there was indeed a problem. However, despite the proposed delisting DEQ wants to proceed with modeling the river and establish limits for NPDES sources. Therefore, based on this information, EPA would not recommend delisting this AU for total phosphorus.
Response:	DEQ has laid out the data and information used as a basis for delisting Pend Oreille River in Attachment A. The EPA comment that "previous years have shown problems, and DEQ staff believes that there is indeed a problem" is not credible and lacking sufficient information to address. DEQ met via conference call with EPA on December 28, 2010, to clarify EPA's concerns. Much of the information in Attachment A is in response to EPA's concerns and provides sufficient basis for delisting. DEQ does want to proceed with the modeling of the Pend Oreille River as explained in Attachment A, section 10. The fact that additional modeling is planned should not be confused as a line of evidence of impairment. The purpose of the additional modeling is to assist with validation of future permits and describe Pend Oreille River's pH characteristics. DEQ and EPA are working with dischargers to develop permits that protect water quality and plan for the future. The model would be used to test future loading scenarios to ensure continuing protection of beneficial uses, while using 2009 conditions as a benchmark. DEQ is also looking at pH to determine the driving parameters to changes in pH.

Comment #68

Assessment Units:	ID17060201SL015_03 ID17060201SL015_04
Water Body:	Garden Creek
Commenter:	EPA Region 10
Comment:	Based on the information provided to support the delisting of cause unknown (suspected nutrient impairment) and sediment, it does not appear that DEQ has done any further evaluation of Garden Creek as proposed in the final Upper Salmon Subbasin Assessment and TMDL, approved March 19, 2003, to show compliance with Idaho's WQS. EPA does not believe the information provided in the TMDL supports the proposed delisting of cause unknown and sediment and recommends the AU remain in Category 5 until further evaluation of the waterbody has been conducted.
Response:	DEQ agrees. DEQ returned this assessment unit (AU) to Category 5 for cause unknown and sediment until DEQ can re-evaluate the water body to ensure compliance with Idaho's water quality standards. Furthermore, low flow alterations and physical substrate habitat alterations have been added as causes to this AU, as proposed in the total maximum daily load. This AU is now additionally displayed in Category 4c.

Comment #69

Assessment Unit:	ID17060201SL027_05
Water Body:	Salmon River-Thompson Creek to Squaw Creek
Commenter:	EPA Region 10

Comment: DEQ is proposing to delist Salmon River for sediment and temperature. In reviewing the Upper Salmon Subbasin TMDL, EPA did not find temperature data for Salmon River and would like to review the data collected that supports this delisting. During the review of the draft TMDL EPA provided the following comment on the proposed delisting for sediment:

The BURP data for the Salmon River shows that one of the 1995 locations, between Alturas Lake Creek and Hwy 93, is in full support of beneficial uses, yet the MBI score falls below the 3.5 and the Habitat Score falls below 70, scores that would typically lead to a "Needs Verification" assessment. The MBI score for the Headwaters above Frenchman Creek in the 1998 assessment is 2.48. IDEQ did note that the 1998 information has not been assessed. However, this information coupled with the 42% and 51 % of depth fines less than 6.35 mm at the upper and lower sites would seem to indicate that these sites need further assessment to determine if all areas in question are full support of beneficial uses. Table 20 on page 59, "Data gaps for 303(d) listed water bodies," also states that limited suspended sediment and temperature data are available for the Salmon River and there are only two depth fine samples, again this would seem to suggest that further assessment is needed before a determination about whether or not a TMDL would be necessary for this system.

EPA does not believe the information provided in the TMDL supports the proposed delistings and still recommends further evaluation of this water.

Response: DEQ returned this assessment unit to Category 5 for sediment and temperature but will be re-evaluating the readily available sediment data for the 2012 Integrated Report. DEQ believes the data suggest that the Salmon River is not impaired for sediment. However, during the development of the *Upper Salmon River Subbasin Assessment and TMDL* (DEQ 2003d), the assessment was based on macroinvertebrate biotic index (MBI) scores, which were generated for streams not large rivers.

Although the *Upper Salmon River Subbasin Assessment and TMDL* states there is not a temperature impairment, DEQ determined there is not enough data to support this conclusion. Until continuous temperature data is collected to suggest otherwise, temperature will remain in Category 5.

Comment #70

Assessment Unit: ID17060201SL047_05

Water Body: Salmon River-Valley Creek to Yankee Fork Creek

Commenter: EPA Region 10

Comment: DEQ is proposing to delist Salmon River for sediment and temperature. In reviewing the Upper Salmon Subbasin TMDL, EPA did not find temperature data for Salmon River and would like to review the data collected that supports this delisting. During the review of the draft TMDL EPA provided the following comment on the proposed delisting for sediment:

The BURP data for the Salmon River shows that one of the 1995 locations, between Alturas Lake Creek and Hwy 93, is in full support of beneficial uses, yet the MBI score falls below the 3.5 and the Habitat Score falls below 70, scores that would typically lead to a "Needs Verification" assessment. The MBI score for the Headwaters above Frenchman Creek in the 1998 assessment is 2.48. IDEQ did note that the 1998 information has not been assessed. However, this information coupled with the 42% and 51 % of depth fines less than 6.35 mm at the upper and lower sites would seem to indicate that *these sites need further assessment to determine if all areas in question are full support of beneficial uses. Table 20 on page 59, "Data gaps for 303(d) listed water bodies," also states that limited suspended sediment and temperature data are available for the Salmon River and there are only two depth fine samples, again this would seem to suggest that further assessment is needed before a determination about whether or not a TMDL would be necessary for this system.*

EPA does not believe the information provided in the TMDL supports the proposed delistings and still recommends further evaluation of this water.

Response: DEQ returned this assessment unit to Category 5 for sediment and temperature but will be re-evaluating the readily available sediment data for the 2012 Integrated Report. DEQ believes the data suggest that the Salmon River is not impaired for sediment. However, during the development of the *Upper Salmon River Subbasin Assessment and TMDL* (DEQ 2003d), the assessment was based on macroinvertebrate biotic index (MBI) scores, which were generated for streams not large rivers.

Although the *Upper Salmon River Subbasin Assessment and TMDL* states there is not a temperature impairment, DEQ determined there is not enough data to support this conclusion. Until continuous temperature data are collected that suggest otherwise, temperature will remain in Category 5.

Comment #71

Assessment Unit: ID17060201SL063_05

Water Body: Salmon River

Commenter: EPA Region 10

Comment: DEQ is proposing to delist Salmon River for sediment and temperature. In reviewing the Upper Salmon Subbasin TMDL, EPA did not find temperature data for Salmon River and would like to review the data collected that supports this delisting. During the review of the draft TMDL EPA provided the following comment on the proposed delisting for sediment:

The BURP data for the Salmon River shows that one of the 1995 locations, between Alturas Lake Creek and Hwy 93, is in full support of beneficial uses, yet the MBI score falls below the 3.5 and the Habitat Score falls below 70, scores that would typically lead to a "Needs Verification" assessment. The MBI score for the Headwaters above Frenchman Creek

in the 1998 assessment is 2.48. IDEQ did note that the 1998 information has not been assessed. However, this information coupled with the 42% and 51 % of depth fines less than 6.35 mm at the upper and lower sites would seem to indicate that these sites need further assessment to determine if all areas in question are full support of beneficial uses. Table 20 on page 59, "Data gaps for 303(d) listed water bodies," also states that limited suspended sediment and temperature data are available for the Salmon River and there are only two depth fine samples, again this would seem to suggest that further assessment is needed before a determination about whether or not a TMDL would be necessary for this system.

EPA does not believe the information provided in the TMDL supports the proposed delistings and still recommends further evaluation of this water.

Response: DEQ returned this assessment unit to Category 5 for sediment and temperature but will be re-evaluating the readily available sediment data for the 2012 Integrated Report. DEQ believes the data suggest that the Salmon River is not impaired for sediment. However, during the development of the *Upper Salmon River Subbasin Assessment and TMDL* (DEQ 2003d), the assessment was based on macroinvertebrate biotic index (MBI) scores, which were generated for streams not large rivers.

Although the *Upper Salmon River Subbasin Assessment and TMDL* states there is not a temperature impairment, DEQ determined there is not enough data to support this conclusion. Until continuous temperature data are collected that suggest otherwise, temperature will remain in Category 5.

Comment #72

Assessment Unit: ID17060201SL072_05

Water Body: Salmon River

Commenter: EPA Region 10

Comment: DEQ is proposing to delist Salmon River for sediment. During the review of the draft TMDL EPA provided the following comment on the proposed delisting for sediment:

The BURP data for the Salmon River shows that one of the 1995 locations, between Alturas Lake Creek and Hwy 93, is in full support of beneficial uses, yet the MBI score falls below the 3.5 and the Habitat Score falls below 70, scores that would typically lead to a "Needs Verification" assessment. The MBI score for the Headwaters above Frenchman Creek

in the 1998 assessment is 2.48. IDEQ did note that the 1998 information has not been assessed. However, this information coupled with the 42% and 51 % of depth fines less than 6.35 mm at the upper and lower sites would seem to indicate that these sites need further assessment to determine if all areas in question are full support of beneficial uses. Table 20 on page 59, "Data gaps for 303(d) listed water bodies," also states that limited suspended sediment and temperature data are available for the Salmon River and there are only two depth fine samples, again this would seem to suggest that further assessment is needed before a determination about whether or not a TMDL would be necessary for this system.

EPA does not believe the information provided in the TMDL supports the proposed delisting and still recommends further evaluation of this water.

Response: DEQ returned this assessment unit to Category 5 for sediment but will be re-evaluating the readily available data for the 2012 Integrated Report. DEQ believes the data suggest that the Salmon River is fully supporting its beneficial uses. However, during the development of the *Upper Salmon River Subbasin Assessment and TMDL* (DEQ 2003d), the assessment was based on macroinvertebrate biotic index (MBI) scores, which were generated for streams not large rivers.

Comment #73

Assessment Unit: ID17060201SL034_04

Water Body: Yankee Fork Creek

Commenter: EPA Region 10

Comment:	EPA does not believe the information provided in the Upper Salmon Subbasin Assessment and TMDL supports the proposed delisting of sediment and physical habitat alteration. EPA recommends further evaluation of this waterbody.
Response:	DEQ conducted additional monitoring in July 2005 (BURP ID 2005SIDFA024). According to percent fines data, 10.23% of the substrate consisted of material less than or equal to 2.5 millimeters in size. According to DEQ's *Guide to Selection of Sediment Targets for Use in Idaho TMDLs* (DEQ 2003a), most impairment is noted when percent fines of this size are greater than 30%. Stream bank stability was determined to be excellent, with 93% of the stream rated as covered and stable. Additionally, the average BURP score was 2.33 (stream macroinvertebrate index [SMI] = 3, stream fish index [SFI] = 2, and stream habitat index [SHI] = 2), which is considered fully supporting its beneficial uses according to DEQ's *Water Body Assessment Guidance* (Grafe et al. 2002). This 2005 score, compared to 1.67 (SMI = 3, SFI = 1, and SHI = 1) in 1995, demonstrates that water quality has improved. Therefore, DEQ stands by the decision to delist sediment and physical substrate habitat alterations.

Comment #74

Assessment Units:	ID17060201SL133_02 ID17060201SL133_03
Water Body:	Broken Wagon Creek
Commenter:	EPA Region 10
Comment:	These AUs were not found on the pages cited in the delisting rationale from the Upper Salmon Subbasin Assessment and TMDL. Please provide documentation that supports the delisting of sediment and cause unknown (suspected nutrient impairment).
Response:	Broken Wagon Creek and Lone Pine Creek are subwatersheds of Warm Springs Creek, which explains why pages 55 and 56 were cited in the delisting rationale. Together these two sub-watersheds make up the Warm Springs Creek drainage. This segment (WQLS 3019) was first listed for sediment and nutrients on the 1994 §303(d) list, which was promulgated by EPA as part of the first total maximum daily load lawsuit. EPA listed this water solely because it was listed in Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment of DEQ's 1992 Water Quality Status Report. Although Broken Wagon Creek was captured in this report, the original assessment was not based on any actual water quality monitoring data (biological, physical, or chemical). Suspected sediment and nutrient impairments were a case of best professional judgment. Given the lack of listing history to explain what data were used, if any, DEQ proposes to delist cause unknown (nutrients). However, DEQ will return sediment to Category 5 until additional water quality monitoring data can be collected to conclusively demonstrate that aquatic life beneficial uses are not impaired by sediment. Lastly, Broken Wagon Creek will be added to Category 4c for low flow alterations.

Comment #75

Assessment Unit:	ID17060203SL039_07
Water Body:	Salmon River
Commenter:	EPA Region 10

Comment:	DEQ needs to demonstrate why this AU was originally added to Category 5 (303(d)) for combined biota/habitat bioassessments and why the original listing is now determined to have been incorrect.
Response:	Although the listing of this segment on the 1994 §303(d) list was not based on any actual water quality monitoring data (biological, physical, or chemical) but rather a case of best professional judgment, DEQ will return this assessment unit to Category 5 for cause unknown until DEQ has sufficient data to make an accurate beneficial use support determination. Furthermore, since the original assessment did not conclude that there is a biological impairment on this section of the Salmon River, this assessment unit should not be listed for combined biota/habitat bioassessments but rather for cause unknown.

Comment #76

Assessment Unit:	ID17060203SL041_07
Water Body:	Salmon River
Commenter:	EPA Region 10
Comment:	DEQ needs to demonstrate why this AU was originally added to Category 5 (303(d)) for combined biota/habitat bioassessments and why the original listing is now determined to have been incorrect.
Response:	Although the listing of this segment on the 1994 §303(d) list was not based on any actual water quality monitoring data (biological, physical, or chemical) but rather a case of best professional judgment, DEQ will return this assessment unit to Category 5 for cause unknown until DEQ has sufficient data to make an accurate beneficial use support determination. Furthermore, since the original assessment did not conclude that there is a biological impairment on this section of the Salmon River, this assessment unit should not be listed for combined biota/habitat bioassessments but rather for cause unknown.

Comment #77

Assessment Unit:	ID17060203SL042_07
Water Body:	Salmon River
Commenter:	EPA Region 10
Comment:	DEQ needs to demonstrate why this AU was originally added to Category 5 (303(d)) for combined biota/habitat bioassessments and why the original listing is now determined to have been incorrect.
Response:	Although the listing of this segment on the 1994 §303(d) list was not based on any actual water quality monitoring data (biological, physical, or chemical) but rather a case of best professional judgment, DEQ will return this assessment unit to Category 5 for cause unknown until DEQ has sufficient data to make an accurate beneficial use support determination. Furthermore, since the original assessment did not conclude that there is a biological impairment on this section of the Salmon River, this assessment unit should not be listed for combined biota/habitat bioassessments but rather for cause unknown.

Comment #78

Assessment Unit:	ID17060203SL046_06
Water Body:	Salmon River
Commenter:	EPA Region 10
Comment:	DEQ needs to demonstrate why this AU was originally added to Category 5 (303(d)) for combined biota/habitat bioassessments and why the original listing is now determined to have been incorrect.
Response:	Although the listing of this segment on the 1994 §303(d) list was not based on any actual water quality monitoring data (biological, physical, or chemical) but rather a case of best professional judgment, DEQ will return this assessment unit to Category 5 for cause unknown until DEQ has sufficient data to make an accurate beneficial use support determination. Furthermore, since the original assessment did not conclude that there is a biological impairment on this section of the Salmon River, this assessment unit should not be listed for combined biota/habitat bioassessments but rather for cause unknown.

Comment #79

Assessment Unit:	ID17060203SL047_06
Water Body:	Salmon River
Commenter:	EPA Region 10
Comment:	DEQ needs to demonstrate why this AU was originally added to Category 5 (303(d)) for combined biota/habitat bioassessments and why the original listing is now determined to have been incorrect.
Response:	Although the listing of this segment on the 1994 §303(d) list was not based on any actual water quality monitoring data (biological, physical, or chemical) but rather a case of best professional judgment, DEQ will return this assessment unit to Category 5 for cause unknown until DEQ has sufficient data to make an accurate beneficial use support determination. Furthermore, since the original assessment did not conclude that there is a biological impairment on this section of the Salmon River, this assessment unit should not be listed for combined biota/habitat bioassessments but rather for cause unknown.

Comment #80

Assessment Unit:	ID17060203SL053_06
Water Body:	Salmon River
Commenter:	EPA Region 10
Comment:	DEQ needs to demonstrate why this AU was originally added to Category 5 (303(d)) for combined biota/habitat bioassessments and why the original listing is now determined to have been incorrect.
Response:	Although the listing of this segment on the 1994 §303(d) list was not based on any actual water quality monitoring data (biological, physical, or chemical) but rather a case of best professional judgment, DEQ will return this assessment unit to Category 5 for cause unknown until DEQ has sufficient data to make an accurate beneficial use support determination.

Furthermore, since the original assessment did not conclude that there is a biological impairment on this section of the Salmon River, this assessment unit should not be listed for combined biota/habitat bioassessments but rather for cause unknown.

Comment #81

Assessment Units:	ID17060306CL061_02 ID17060306CL061_03
Water Body:	West Fork of Little Bear Creek
Commenter:	EPA Region 10
Comment:	In the TMDL for the Potlatch River Subbasin, approved on February 20, 2009, there is monitoring data for a tributary called the West Fork of Little Bear Creek. Data was collected from two sites on the creek. One site is immediately upstream of the City of Troy WWTP discharge and one site is below the discharge. The monitoring data upstream of the WWTP discharge contains 26 sample dates. The results of analyses for total phosphorus range from a minimum of 0.05 mg/l to a maximum of 0.39 mg/l. The site below the Troy WWTP has a total of 26 sample dates. The results for the site below the WWTP include concentrations from a minimum of 0.07 mg/l to a maximum of 3.80 mg/l. Below the Troy WWTP there are six samples with total phosphorus concentrations of 1.20 mg/l to 3.80 mg/l. The mean concentration for the entire data set for the samples below the Troy WWTP is 0.829 mg/l. Considering that the recommended Ecoregional target for total phosphorus for the Columbia Plateau Ecoregion is 0.030 mg/l and the Gold Book recommended concentration of total phosphorus in streams is 0.100 mg/l, it is clear that the stream is impaired by total phosphorus and should be moved from Category 3 to Category 5 (303(d)) for total phosphorus.
Response:	An exceedance of the recommended Columbia Plateau sub-ecoregion criterion does not indicate a violation of the State's narrative nutrient standard because the criterion represents reference conditions for the arid geographic areas of the Columbia Plateau, which do not include the Potlatch River Watershed. Instead, a more in-depth analysis of actual conditions and water quality characteristics was provided in the *Potlatch River Subbasin Assessment and TMDLs* (DEQ 2008b), approved by EPA in February 2009, that specifically identifies nitrogen as causing in-stream dissolved oxygen criteria violations and exceeding the State's narrative water quality standard for nutrients. The City of Troy operates a waste water treatment plant (WWTP) and discharges effluent to the West Fork of Little Bear Creek (WFLBC) under the authority of a National Pollutant Discharge Elimination System (NPDES) permit based on best available technology limits. In 2001, the Potlatch River total maximum daily load (TMDL) watershed monitoring plan established two monitoring sites on WFLBC: one above the WWTP and one just below the WWTP effluent outfall pipe. The proximity of the 2001 lower monitoring site to the outfall pipe does not allow for complete mixing of the effluent with the receiving water and the data from this site are more representative of the effluent and not considered to be representative of the receiving water. A second monitoring site was established in 2006 approximately 200 yards further downstream to collect in-stream water samples that better represents in-stream receiving water quality conditions. An analysis of the ratio of in-stream nitrogen to phosphorus concentrations using the most recent data indicates nutrient loading by nitrogen is a concern for plant uptake. The analysis showed no violations of the acute or chronic criterion for

ammonia. However, the data suggested that nitrification is occurring in-stream and is affecting in-stream oxygen concentrations. The analysis concluded that biochemical oxygen demand resulting from plant uptake is less than in-stream nitrification and both can be managed by controlling the in-stream total inorganic nitrogen load. The analysis led to the nutrient TMDL to limit nitrogen and enhance dissolved oxygen concentrations to protect water quality in WFLBC.

Total nitrogen to total phosphorus (TP) ratios greater than 7.0 are indicative of a phosphorus-limited system; ratios less than 7.0 are indicative of a nitrogen-limited system. Total nitrogen includes both inorganic and organic forms of nitrogen. NO_2+NO_3-N plus ammonia (NH_3-N), referred to as total inorganic nitrogen (TIN), was used in the nutrient analysis of WFLBC since these forms of nitrogen are available for plant uptake and can affect in-stream dissolved oxygen concentrations. The annual mean ratio of TIN to orthophosphate (OP) in WFLBC is 6:6:1 (Table 1). The mean TIN:OP ratio during May–October was 6:8:1 (Table 2).

Figure 1 shows the relationships among flow, TIN, and dissolved oxygen. When flow decreases, TIN values increase and dissolved oxygen decreases to levels where violations are observed. A significant relationship between TIN and dissolved oxygen was observed in WFLBC during the critical low flow summer period. Figure 2 shows that approximately 73% of the variation in dissolved oxygen can be explained by TIN levels during the critical flow period. This relationship is much more significant than that of OP and dissolved oxygen during the same period (Figure 3), supporting the conclusion that, at this time, the oxygen demand required for nitrification of ammonia to nitrate nitrogen is having a greater influence on dissolved oxygen concentrations than the consumption of oxygen by aquatic vegetation life cycles cultivated by phosphorus concentrations.

Furthermore, although TP concentrations measured in 2006 were above reference and guidance values, DEQ is concerned there is no documentation of beneficial use impairment in WFLBC. Additionally, DEQ notes the following:

1. 2006, the most recent year TP data was collected, was a drought year
2. 24-hour dissolved oxygen data are not available
3. No documentation of visible slime growth or other nuisance aquatic growth exists

Additionally, the Potlatch River TMDL demonstrates the need for additional information to document the presence and extent of nuisance algae, nutrient treatment options that will not lead to eliminating the downstream steelhead population, and development of an appropriate NPDES permit for the WWTP.

The additional information called for in the TMDL is being provided by Erin Brooks, Ricardo Sanchez-Murill, and Jan Boll of the University of Idaho Water Resources Program and Department of Biological and Agricultural Engineering. The report is titled, "Impacts of the Troy Waste Water Treatment Plant on Steelhead (Oncorhynchus Mykiss) Habitat in the West Fork Little Bear Creek Drainage." In the report, the authors address the known data gaps and critical issues necessary to assess the impact of the Troy discharge on downstream macroinvertebrates, algae and fish. At this time, the field work associated with the project has been completed and the draft report is undergoing peer review.

Due to the absence of the critical information, namely the beneficial use impairment and documentation of nuisance aquatic growth associated with TP, **DEQ is proposing to postpone adding TP to the 2010 Integrated Report**. This allows time for the Brooks et al. report noted above to be completed and made available to the public. It also provides

DEQ the opportunity to evaluate the report, examine its data, and determine how it might support listing or not listing TP as part of the 2012 Integrated Report. In addition, DEQ is planning on gathering photos this summer to document the presence/absence, extent, and vigor of slime growths and nuisance aquatic growth in WFLBC above and below the Troy's wastewater discharge point.

Table 1. Total inorganic nitrogen and orthophosphate summary for West Fork Little Bear Creek (2006-2007).

Date	NO_2+NO_3 (mg/L)	NH_3 (mg/L)	OP (mg/L)
4/11/2006	0.11	0.05	0.036
4/27/2006	0.05	0.05	0.06
5/10/2006	0.05	0.38	0.075
5/23/2006	0.19	0.49	0.14
6/28/2006	1.9	1.4	0.43
7/12/2006	7.2	3.1	1.2
7/25/2006	6.4	11	2.4
8/9/2006	15	4.6	2.4
8/24/2006	No Data	No Data	No Data
9/7/2006	7.5	14	3.6
9/20/2006	5.9	9.2	2.2
10/6/2006	6.8	11	1.9
10/20/2006	3.9	4.8	1.1
11/1/2006	3.8	7.6	1.5
12/7/2006	0.51	0.69	0.15
2/6/2007	0.36	0.34	0.089
3/2/2007	0.58	0.05	0.046
3/23/2007	0.11	0.05	0.05
4/27/2007	0.05	0.25	0.068
5/9/2007	0.2	0.59	0.14
5/24/2007	0.35	0.96	0.19
6/13/2007	0.97	1.4	0.31
7/11/2007	5.6	11	2.2
7/25/2007	19	3.9	2.5
8/6/2007	17	0.16	3
8/23/2007	14	0.05	2.9
9/13/2007	17	0.05	3.3
10/11/2007	13	2	2.5

Source: Reprinted from DEQ 2008b, Table 15

Table 2. Total Inorganic Nitrogen summary for West Fork Little Bear Creek (2006-2007).

Date	DO (mg/L)	% Sat	NO_2+NO_3 (mg/L)*	NH_3 (mg/L)*	TIN (mg/L)	OP (mg/L)	Flow
5/10/2006	9.32	89.5%	0.05	0.38	0.43	0.08	9.486
5/23/2006	8.13	86.3%	0.19	0.49	0.68	0.14	5.88
6/28/2006	5.69	65.8%	1.9	1.4	3.3	0.43	1.372
7/12/2006	4.48	48.8%	7.2	3.1	10.3	1.2	0.897
7/25/2006	3.64	41.4%	6.4	11	17.4	2.4	0.468
8/9/2006	3.62	39.3%	15	4.6	19.6	2.4	0.298
8/24/2006	3.37	35.2%	No Data	No Data	No Data	No Data	0.246
9/7/2006	2.72	28.1%	7.5	14	21.5	3.6	0.242
9/20/2006	3.9	36.7%	5.9	9.2	15.1	2.2	0.435
10/6/2006	3.84	34.3%	6.8	11	17.8	1.9	0.552
10/20/2006	4.9	42.6%	3.9	4.8	8.7	1.1	1.772
5/9/2007	7.98	84.9%	0.2	0.59	0.79	0.14	6.505
5/24/2007	8.82	88.7%	0.35	0.96	1.31	0.19	4.131
6/13/2007	7.37	72.2%	0.97	1.4	2.37	0.31	1.863
7/11/2007	3.11	36.4%	5.6	11	16.6	2.2	1.378
7/25/2007	2.32	26.0%	19	3.9	22.9	2.5	0.522
8/6/2007	5	54.5%	17	0.16	17.16	3	0.301
8/23/2007	6.46	68.4%	14	0.05	14.05	2.9	0.276
9/13/2007	6.98	70.1%	17	0.05	17.05	3.3	0.233
10/11/2007	4.71	42.7%	13	2	15	2.5	0.134
Average	**5.32**	**55**	**7.47**	**4.21**	**11.69**	**1.71**	**1.85**

* Samples with results below the detection limit were given a value of 0.05 mg/L to compute the analysis
Source: Reprinted from DEQ 2008b, Table 16

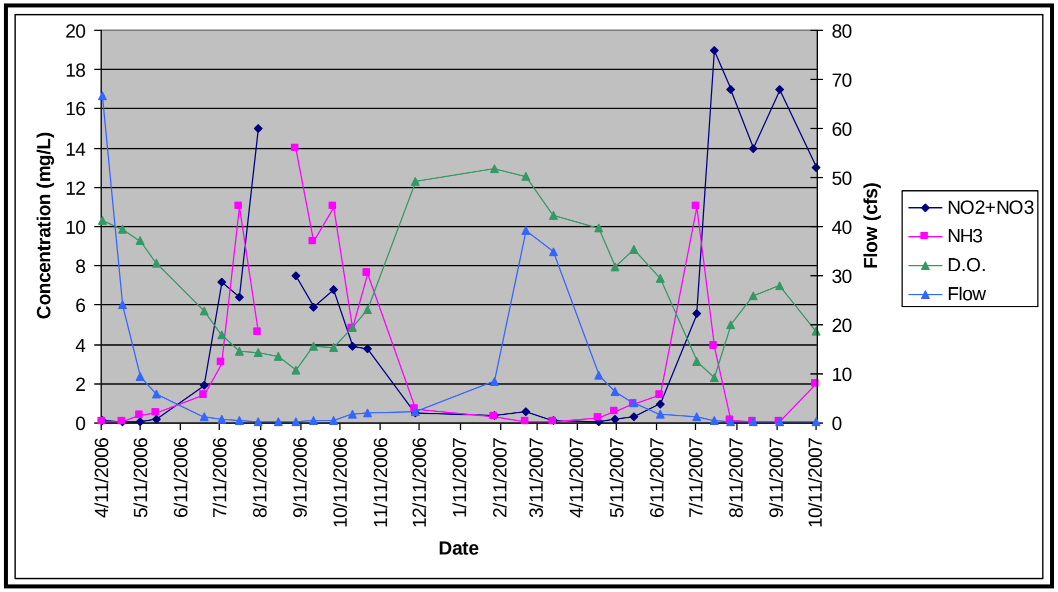


Figure 1. Flow, Dissolved Oxygen, and Total Inorganic Nitrogen (NO2+NO3-N and NH3-N Combined), West Fork Little Bear Creek (Source: Reprinted from DEQ 2008b, Figure 16)

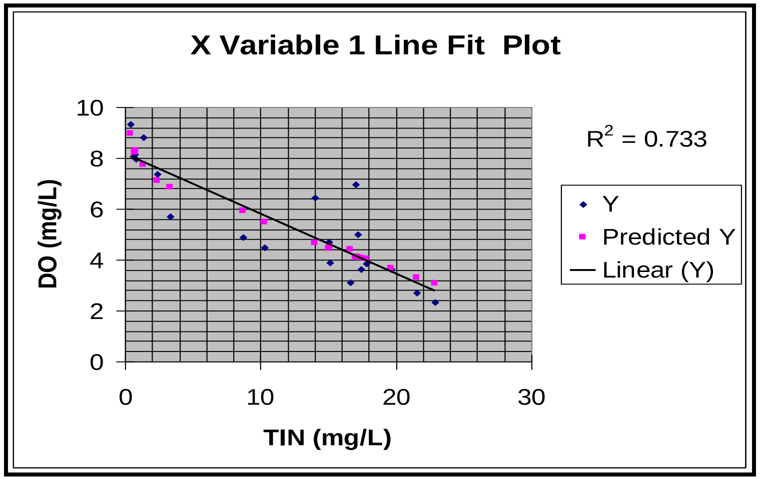


Figure 2. Total Inorganic Nitrogen (TIN) and Dissolved Oxygen (DO), West Fork Little Bear Creek (Source: Reprinted from DEQ 2008b, Figure 17)

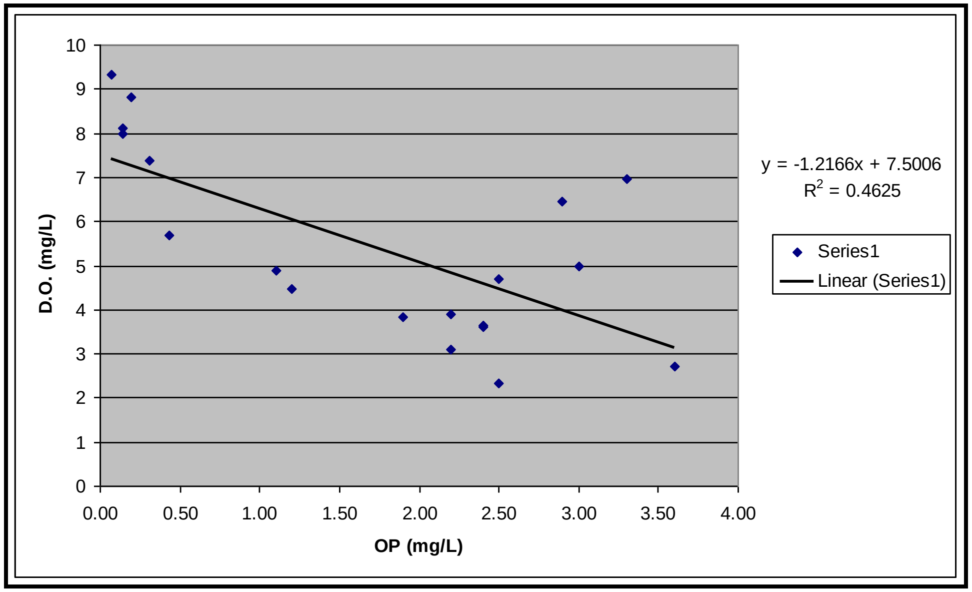


Figure 3. Orthophosphate (OP) and Dissolved Oxygen (DO), West Fork Little Bear Creek (Source: Reprinted from DEQ 2008b, Figure 18)

Comment #82

Assessment Unit:	ID17040218SK026_03
Water Body:	Bridge Creek (aka Twin Bridge Creek)
Commenter:	EPA Region 10
Comment:	DEQ cites the Big Lost Subbasin Assessment and TMDL that states that there was not sufficient temperature data to develop a TMDL for thermal loading for this AU. Insufficient data may be a reason to not develop a TMDL, but it is not reason to delist this waterbody.
Response:	DEQ returned this assessment unit to Category 5 for temperature until sufficient data can be collected to assist in the development of a total maximum daily load for thermal loading.

Comment #83

Assessment Unit:	ID17040221SK023_03
Water Body:	Silver Creek
Commenter:	EPA Region 10

Comment: In DEQ's delisting justification for combined biota/habitat bioassessment, it is noted that the WBAG is not designed for spring fed systems and that the monitoring data collected does not accurately reflect this AU. Given that BURP data interpretation protocols were not designed for spring fed systems, on what basis was it determined that Silver Creek meets water quality standards?

Response: EPA is correct. Until DEQ can demonstrate that Silver Creek meets water quality standards, it will remain in Category 5 for combined biota/habitat bioassessment.

Comment #84

Assessment Units: ID17060205SL012_02a
ID17060205SL012_05
ID17060205SL013_03
ID17060205SL013_04

Water Body: Bear Valley Creek

Commenter: EPA Region 10

Comment: The Bear Valley Creek 4b Justification (June 2010) has been submitted as a basis for moving waterbodies within the Bear Valley subbasin to Category 4b. With one exception, review of the Justification indicates that it satisfies the six elements of a 4b plan identified in EPA guidance. The Justification identifies a road sediment target of 20% above natural sediment loading as a level that would support beneficial uses. We agree with this target, but the plan indicates that one assessment unit, 012_2a, would not achieve this target even after road improvements are complete (p. 83). This issue was discussed with the USFS staff (Kari Grover-Wier and John Thornton) on 11/16/10.

Since the 4b plan was produced, additional field evaluation of the 569 road has been conducted during this past summer. Upon closer inspection of the apparent major sediment delivery point to 0l2_02a, it turns out that the underlying GRAIP roads analysis incorrectly determined that this drain point delivered to the stream, when in fact very little if any of the sediment from this point reaches the stream. Consequently much less road related sediment likely reaches 012_ 02a. It is expected that based on the revised road delivery information, the planned road treatments on road 569, scheduled to begin during the summer of 2011, will result in sediment production much closer to the 20% over background sediment target. We recommend that these additional findings be used to revise the underlying GRAIP model results, and that the revised figures be used to revise Table 2.12 in the Bear Valley 4b plan.

Response: The U.S. Forest Service incorporated the revised Geomorphic Road Analysis and Inventory Package (GRAIP) information into the final document in response to these comments. Table 2.12 in the *Bear Valley Creek 4b Justification* (DEQ and USFS 2010) has been revised with this new information.

Comment #85

Assessment Unit:	
Water Body:	
Commenter:	EPA Region 10
Comment:	On page 13 of DEQ's Principles and Polices for the 2010 Integrated Report, delisting rationale 1 indicates that: Data and/or information lacking to determine water quality status; original basis for listing was incorrect (Category 3). The fact that information is lacking by itself is not an adequate basis to conclude the original basis was incorrect. There must be a demonstration of good cause for delisting, not simply a lack of information.
Response:	The set of delisting reasons in the Principles and Polices for the 2010 Integrated Report is a result of the November 2007 ADB V2.3.0 release notes. Wendy Reid, EPA Office of Water, is aware that the existing delisting rationales do not exactly fit the situations that Idaho encounters. Unfortunately, in order to revise/update the existing delisting rationale in ADB, the ATTAINS committee needs to determine how the list should be updated and then forward those recommendations to the program supervisors for review and approval. This process can be very complicated and time consuming. In the meantime, DEQ will have to use what is available. However, if there is no existing or readily available data to support a designated use status determination, DEQ should have the option of either moving the water body back to Category 3 if there are no other assessed uses or removing that cause. A majority of DEQ's waters were listed because they appeared in Appendix D: Idaho Impaired Stream Segments Requiring Further Assessment of the 1992 Idaho Water Quality Status Report, which indicated waters that may not be supporting their beneficial uses but where additional monitoring was warranted. These assessments were based on evaluations and not actual water quality monitoring data (biological, chemical, or physical).

Comment #86

Assessment Unit:	
Water Body:	
Commenter:	EPA Region 10
Comment:	On page 19 of DEQ's Principles and Polices for the 2010 Integrated Report, this provision of the listing policy indicates that a 60 day call for data was held between July 13, 2009 and September 11, 2009. We support such notices for relevant data, but the policy does not indicate whether data submitted after this time, including new data submitted during the current comment period would be considered for listing decisions. We believe the policy should indicate that data received by IDEQ up to the close of the public comment period on the draft 2010 would be considered for listing purposes for the final 2010 Integrated Report.
Response:	DEQ revised this section of the Principles and Polices for the 2010 Integrated Report to include such language.

Comment #87

Assessment Unit:	
Water Body:	
Commenter:	EPA Region 10
Comment:	On page 24 of the Principles and Polices for the 2010 Integrated Report, it would help to clarify that exceedance of coldwater aquatic life criteria outside the summer period could also be a basis for 303(d) listing. While unlikely, it is conceivable that discharges from point sources (e.g. meat packing facilities, food processors, WWTPs) could result in exceedances of coldwater temperature criteria during non-summer periods.
Response:	DEQ is not implying the coldwater temperature criteria don't apply outside the summer period of June 21 through September 21. This section specifies the time period when the calculation of the 10% exceedance is to be applied.

Comment #88

Assessment Unit:	
Water Body:	
Commenter:	EPA Region 10
Comment:	On page 32 of the Principles and Polices for the 2010 Integrated Report DEQ states that they are soliciting information on whether data is available for any particular water in Category 1 which would show that human impacts are impairing water quality. We agree with this approach, but the public notice for data availability and notice for comment on the draft list should specifically mention this request, otherwise the public would be unaware of this policy and request for information.
Response:	For future Integrated Reports, DEQ will make sure to advertise that we are soliciting information for Category 1 during the call for data and the public comment period.

Comment #89

Assessment Unit:	
Water Body:	
Commenter:	EPA Region 10
Comment:	In addition to making the draft Integrated Report and waterbody location information available for public review, the public should also be able to easily access (e.g. via online reports) all data and rationale available for all waters assessed as part of the Report. For example, this would include data and reports in ADB for waters assessed but not listed, waters assessed and listed, and waters assessed and delisted.
Response:	DEQ does not have a comprehensive Integrated Report as suggested in the comment. However, much of the information EPA is requesting be made available is in fact available, but not in one document (i.e., an Integrated Report). EPA requests that data and reports that are in the Assessment Database be made available for: 1) waters assessed and found to be fully supporting, 2) waters assessed and listed (in Category 5), and 3) waters assessed and delisted. The Integrated Report captures the rationale for adding a water body to a category, but not necessarily the underlying documents and reports.

	Those delisted water bodies would likewise have documents not necessarily viewable by the public but mentioned in the listing rationale. If complying BURP data exists for case 2 or 3 listed above, the public can view that via DEQ's interactive map by assessment unit. Including all these reports would inflate the Integrated Report significantly in terms of document volume. That said, DEQ will consider better ways for the public to access the information noted above for the 2012 Integrated Report.
Comment #90	
Assessment Unit:	
Water Body:	
Commenter:	EPA Region 10
Comment:	Appendix E of the Principles and Polices for the 2010 Integrated Report identifies the Bruneau HUC as a high priority for TMDL development for "past due" TMDLs pursuant to the Settlement Agreement. After reviewing the 1998 303(d) list, and EPA's approval of the Bruneau TMDL, it is our understanding that temperature TMDLs are still needed for certain waters in the Bruneau HUC to satisfy Settlement Agreement commitments. These waters are missing from and should be added to the list of waters in Appendix D.
Response:	DEQ agrees. DEQ has revised Appendix D (now Appendix N in the final Integrated Report) to include 11 assessment units located in the Bruneau hydrologic unit code (HUC) still requiring a temperature total maximum daily load.
Comment #91	
Assessment Units:	ID17040204SK028_03 ID17040204SK032_02
Water Body:	Teton River-Headwaters to Trail Creek
Commenter:	Givens Pursley
Comment:	According to the Teton River Subbasin Assessment and TMDL the three main segments of the Upper Teton River Basin are listed for various pollutants. However, assessment units ID17040204SK028_03 and ID17040204SK032_02 are listed in Category 2 of the Integrated Report as fully supporting.
Response:	DEQ agrees and apologizes for the oversight. The Assessment Database has been updated by removing these assessment units from Category 2 and displaying them in Category 4c for physical substrate habitat alterations.
Comment #92	
Assessment Units:	ID17040204SK020_04 ID17040204SK026_04
Water Body:	Teton River-Trail Creek to Highway 33
Commenter:	Givens Pursley
Comment:	According to the Teton River Subbasin Assessment and TMDL the three main segments of the Upper Teton River Basin are listed for various pollutants. However the Integrated Report does not display that information accurately.

Response:	DEQ agrees and apologizes for the oversight. The Integrated Report captured sediment in Category 4a but erroneously omitted physical substrate habitat alterations from Category 4c. DEQ has corrected this oversight.
Comment #93	
Assessment Unit:	ID17040204SK017_04
Water Body:	Teton River-Trail Creek to Highway 33
Commenter:	Givens Pursley
Comment:	The Teton River Subbasin Assessment and TMDL listed this AU as being impaired for sedimentation and habitat alteration, but DEQ's online mapping program indicates this AU as not being listed for any pollutnats at all. These errors should be corrected.
Response:	DEQ agrees and apologizes for this oversight. The Assessment Database has been updated by removing this assessment unit from Category 2 and adding it to Category 4a for sediment and Category 4c for physical substrate habitat alterations.
Comment #94	
Assessment Units:	ID17040204SK014_04 ID17040204SK015_04 ID17040204SK016_04
Water Body:	Teton River-Highway 33 to Bitch Creek
Commenters:	Givens Pursley Friends of the Teton River
Comment:	The Teton River Subbasin Assessment and TMDL does not appear to be listed in the Category 4a report of the Integrated Report as an EPA-approved TMDL for nutrients. This omission should be corrected.
Response:	DEQ agrees and apologizes for this oversight. The Assessment Database has been updated to show these assessment units in Category 4a for sediment, total phosphorus, and nitrogen (nitrate) and in Category 4c for physical substrate habitat alterations. In addition, cause unknown has been delisted since nutrients were identified as causing the biological impairment.
Comment #95	
Assessment Unit:	ID17060201SL030_02
Water Body:	Buckskin Creek
Commenter:	Thompson Creek Mining Company

Comment: Most of Buckskin Creek is buried beneath one of the mine's waste rock facilities. A sediment pond is located at the base of the facility and overflow from the pond (designated Outfall 001) is discharged to the channel of Buckskin Creek approximately 2,000 feet above the confluence of Thompson Creek. Stream flow is intermittent in nature and is generally present only during the months of April-August. The flow is highly influenced by precipitation and snow melt.

Buckskin Creek has no designated uses. Because of background conditions and the waste rock facility, selenium concentrations in Buckskin Creek can affect the concentration of selenium in Thompson Creek during periods of low flow, and TCMC therefore captures the outflow from the waste rock dump and two springs adjacent to Buckskin Creek in a pipeline most of the year. Water controlled in this manner is used as process water.

Currently. Buckskin Creek is listed as a Category 2 stream or, in other words, "fully supporting those beneficial uses that have been assessed. In many respects, however, Buckskin Creek in very similar to Pat Hughes Creek in which TCMC's other waste rock facility is located. Pat Hughes Creek is listed in the 2010 Integrated Report as a Category 3 stream, and TCMC believes that Buckskin Creek should also be listed as a Category 3 stream. Based on its stream characteristics, TCMC believes that Category 2 is an incorrect listing for Buckskin Creek. Moreover, the Principles and Policies state that for intermittent waters:

DEQ does not believe its current assessment indices are appropriate for the bioassessment of intermittent waters. DEQ also does not have a specific process for monitoring or assessing intermittent waters. A large portion of these waters are un-assessed and are therefore listed in Category 3 of the Integrated Report. Of the 2,108 AUs that are currently in Category 3, 240 of them had been visited or evaluated and determined to haze zero flow. Due to insufficient available data and information, DEQ is unable to provide a designated use attainment determination. Therefore, these AUs will remain in Category 3 until such time that sufficient data can be collected. Refer to Appendix B, page 51 for the list of AUs that have been determined to have zero flow.

For the reasons discussed above, TCMC requests that Buckskin Creek be listed as a Category 3 stream in the 2010 Integrated Report (insufficient data (or no data) and information to determine if beneficial uses are being attained).

Response: DEQ conducted Beneficial Use Reconnaissance Program (BURP) monitoring in 1997, close to the mouth of Buckskin Creek. Data from this monitoring show the presence of coldwater indicators, both fish and macroinvertebrates. Their presence means cold water aquatic life is an existing use. Because there are existing uses, DEQ must evaluate those uses against appropriate water quality criteria as outlined in DEQ's *Water Body Assessment Guidance* (WBAG) (Grafe et al. 2002). Buckskin Creek has an average score of 2; according to the WBAG, an average score of greater than or equal to 2 is considered fully supporting its beneficial uses, thus placing this assessment unit in Category 2 of the Integrated Report. In addition, the flow at the time of the visit was 1.2 cubic feet per second, a flow well beyond what would be expected for an intermittent stream. Based on the fact that existing uses are present, the flow was not intermittent, and the average score was 2, DEQ cannot put this assessment unit back into Category 3 as requested.

Comment #96	
Assessment Unit:	ID17060201SL026_02
Water Body:	Bruno Creek
Commenter:	Thompson Creek Mining Company
Comment:	Bruno Creek is located both above and below TCMC's tailings pond. During most months of the year, these two segments of Bruno Creek are not connected. The upper segment flows into the tailings pond. Accretion in the lower segment flows through Outfall 003 into Squaw Creek. During the spring runoff, TCMC operates a "runoff interception system" by which water in the upper segment of Bruno Creek is piped around the tailings to the lower segment. Bruno Creek also has no designated uses. Notwithstanding, Bruno Creek is proposed for listing as a Category 5 stream or as "waters [that] do not meet applicable water quality standards for one or more beneficial uses due to one or more pollutants." The basis for the listing is "combined biota/habitat assessment." TCMC believes that Bruno Creek should be listed as a Category 3 stream in the 2010 Integrated Report. The Category 5 list states that Bruno Creek is being listed "source to mouth" (8.78 miles), which indicates that the assessment did not even account for the presence of the tailings pond in the middle of this reach. Below the tailings pond, Bruno Creek is an intermittent stream and the same rationale applies to it as to Buckskin Creek discussed above. Above the tailings pond, uses are undesignated, the stream flows into the tailings and it appears that insufficient data is known to determine if beneficial uses are being attained. TCMC requests that Bruno Creek be listed as a Category 3 stream in the 2010 Integrated Report.
Response:	DEQ conducted Beneficial Use Reconnaissance Program (BURP) monitoring in 1996 and again in 1997 below the tailings pond on Bruno Creek. The flow was 0.7 cubic feet per second (cfs) in 1996 and 1.8 cfs in 1997. Data from these events show macroinvertebrates and fish are present, indicating that cold water aquatic life is an existing use. When the data were evaluated according to DEQ's *Water Body Assessment Guidance* (WBAG) (Grafe et al. 2002), the creek had assessment outcomes of 1.67 for the 1996 event and 1.5 for the 1997 event. These scores indicate the creek is not meeting its beneficial uses, thus placing this assessment unit in Category 5. Bruno Creek was monitored twice, in 1996 and again in 1997, both times failing DEQ's WBAG, indicating something is impacting the biology and or the habitat. While the flow was low in 1996 (0.7 cfs), it was not what DEQ would consider intermittent. There are existing uses in Bruno Creek, and monitoring data indicated it was not supporting those beneficial uses, nor does it appear to be an intermittent stream. Based on this conclusion, DEQ will keep this assessment unit in Category 5 for the 2010 Integrated Report.

Comment #97	
Assessment Units:	ID17060205SL012_02a ID17060205SL012_05 ID17060205SL013_03 ID17060205SL013_04
Water Body:	Bear Valley Creek

Commenter:	MWH Americas, Inc.
Comment:	Please edit all references to the Shoshone-Bannock Tribe in the document to read the Shoshone-Bannock Tribes (e.g., Page 28; Page 78; Page 112).
Response:	These references have been edited to read "the Shoshone-Bannock Tribes" in the *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).
Comment:	Page 40, 1st paragraph, 1st sentence. The sentence should be edited to read as follows: "In the 1950s, dredge mining sponsored by the General Services Administration for recovery of rare earth minerals near the headwaters of Bear Valley Creek left large quantities of unconsolidated dredge tailings along 1.4 miles of the stream's floodplain."
Response:	Comment noted. The *Bear Valley Creek 4b Justification* (DEQ and USFS 2010) document summarizes the dredge mining activities that took place in the 1950s.
Comment:	Page 40, 1st paragraph, add a new sentence at the end of the paragraph: "An estimated 500,000 cubic yards of coarse and fine sediment were recruited to Bear Valley Creek and transported downstream from 1959 through 1984."
Response:	The *Bear Valley Creek 4b Justification* (DEQ and USFS 2010) has been revised to enumerate the cubic feet of sediment recruited to Bear Valley Creek.
Comment:	Page 40, 2nd paragraph, 4th sentence. The sentence should be edited to read as follows: The BPA provided funding for this restoration project and the Shoshone-Bannock Tribes administered the restoration project, with participation from the Boise National Forest, other federal agencies and State of Idaho agencies."
Response:	This suggested edit has been incorporated into the final *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).
Comment:	Page 40, 2nd paragraph, 6th sentence. The sentence should be edited to read as follows: "The restoration effort protects Bear Valley Creek from several million cubic yards of coarse and fine sediments deposited as tailings piles during the dredge mining operation that are still present from being recruited to the stream. The coarse sediment consists of small cobble, gravel and sands derived from the gradual weathering of the granitic rocks that form the Idaho Batholith and are stored as alluvium in Bear Valley. The fine sediment consists of silt, clay and other colloidal particles concentrated during the dredge mining operations and stored in dredge ponds and on the surface of the dredge tailings piles."
Response:	The final *Bear Valley Creek 4b Justification* (DEQ and USFS 2010) discusses the amount of sediment that is being prevented from entering Bear Valley Creek as a result of the Shoshone-Bannock Tribes restoration project.
Comment:	Page 64, 1st full paragraph, 4th sentence. The sentence should be edited to read as follows: "The historic dredge mine is believed to be the most significant sediment source in the Bear Valley Creek portion of the BVW."
Response:	This suggested edit has been incorporated into the final *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).
Comment:	Page 66, Figure 2.12: The white bar color in the graph for 1992 does not match the black color in the legend. The color scheme should be changed to match the legend with the graph.
Response:	The bar colors have been corrected in the *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).

Comment:	Page 78, 2nd paragraph titled Rehabilitation of Big Meadows dredge mine site, 3rd sentence. The sentence should be edited to read as follows: "The resulting impairment of downstream aquatic habitat caused by excess recruitment of coarse and fine sediment was massive and long-lasting."
Response:	This suggested edit has been incorporated into the final *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).
Comment:	Page 78, 2nd paragraph titled Rehabilitation of Big Meadows dredge mine site, insert the following sentence after the 5th sentence: "The stream rehabilitation work did not contribute any measureable sediment to Bear Valley Creek during the construction period from 1985 through 1989."
Response:	A sentence addressing the fact that the rehabilitation work included controls to minimize impact to the stream has been incorporated in the *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).
Comment:	Page 83, 1st paragraph continued from previous page, 1st full sentence. The sentence should be edited to read as follows: "However, stream restoration to achieve water quality standards and full beneficial uses may still take decades in this particular AU."
Response:	This suggested edit has been incorporated into the final *Bear Valley Creek 4b Justification* (DEQ and USFS 2010) on page 82.
Comment:	Page 85, after 1st paragraph, comment: One active restoration measure that IDEQ and the Boise National Forest should consider implementing immediately downstream from the historic dredge mine site is to accelerate the coarse and fine sediment removal from the stream by using suction methods. The stream channel slope and water velocities are not sufficient to mobilize the deposited sediments and lift them onto the surrounding floodplain, under either bank full discharge or under flooding conditions. The miles of suitable Chinook salmon, steelhead trout and bull trout aquatic habitat that continue to be covered by the deposited sediments could be "cleaned" by removing the sediments from the stream using suction methods and transport them back to the dredge mine site for stabilization away from the stream channel. This action would speed up the natural fluvial processes that would otherwise take many more decades to restore the anadromous fish spawning and rearing habitat to beneficial uses. Minimal impact, temporary roads constructed over filter fabric placed along one side of Bear Valley Creek near the stream banks could provide access for trucks and suction equipment to operate and remove the excess sediment from the stream channel. The suction work could be performed during the seasonal window following fry emergence and prior to adult migration into Bear Valley Creek for late summer and fall spawning. The water and sediment suctioned from the stream could be physically separated, with the water routed into a portable tube settling tank before being returned to the stream with no sediment. The removed sediments could be transported to the dredge mine site for permanent storage within the dredge tailings piles where they could not be recruited back to the stream. Segments of the temporary road could be removed and reconstructed further downstream following completion of a cleaned stream reach. A pilot test could be easily performed using recreational-sized suction equipment and a portable tube settling tank near the existing Whitehawk Lookout Road bridge that crosses Bear Valley Creek downstream of the historic dredge mine. A short reach of Bear Valley Creek could be suctioned as a pilot test and then observed for one or more spawning seasons to determine if the deposited sediment removal restores aquatic habitat suitable for Chinook salmon spawning. This action would require a biological assessment and biological opinion allowing the work to meet Endangered Species Act Section 7 requirements.

Response:	This comment was discussed with Boise National Forest hydrologists. At this time, the U.S. Forest Service does not have plans to pursue this type of active restoration and will continue implementing the pollution controls outlined in the *Bear Valley Creek 4b Justification* (DEQ and USFS 2010).
Comment:	Page 112, Appendix A Table: Change Year(s) to "1985 – 1989"; Change Partners to "BPA, Shoshone-Bannock Tribes"; Change Actions, 4th bullet, last sentence to "This involved excavation of approximately 280,000 cubic yards of material."; Add to Length/Area Treated: "7,920 feet".
Response:	This suggested edit has been incorporated into the final *Bear Valley Creek 4b Justification* (DEQ and USFS 2010) document.

References

Anders, P.J., and K.I. Ashley. 2007. The Clear-water paradox of aquatic ecosystem restoration Fisheries 32(3):125–128.

Barko, J.W., and R.M. Smart. 1981. Sediment-based Nutrition of Submersed Macrophytes. Aquatic Botany 10:339–352.

Barko, J.W., M.S. Adams, and N.L. Clescari. 1986. Environmental Factors and Their Consideration in the Management of Submersed Aquatic Vegetation: A Review. Journal of Aquatic Plant Management 24:1–10.

Carignan, R. 1980. Phosphorus sources for aquatic weeds: Water or sediment. Science 207:987–989.

Carignan, R. 1985. Nutrient dynamics in a littoral sediment colonized by the submersed macrophyte Myriophyllum spicatum. Canadian Journal of Fisheries and Aquatic Science 42:1303–1311.

DEQ (Idaho Division of Environmental Quality). 1999. Coeur d'Alene Lake and River (17010303) Subbasin Assessment and Proposed Total Maximum Daily Loads. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2002. Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho. Submitted by Idaho Department of Environmental Quality, Boise Idaho. Prepared by Tetra Tech Inc., in cooperation with the Tri-State Water Quality Council, Sandpoint Idaho. Available at http://www.deq.idaho.gov/media/464368-_water_data_reports_surface_water_tmdls_pend_oreille_lake_ns_pend_oreille_ns_nutrient_entire.pdf.

DEQ (Idaho Department of Environmental Quality). 2003a. Guide to Selection of Sediment Targets for Use in Idaho TMDLs. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2003b. Mid Snake River/Succor Creek Subbasin Assessment and Total Maximum Daily Load. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2003c. Teton River Subbasin Assessment and Total Maximum Daily Load. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2003d. Upper Salmon River Subbasin Assessment and TMDL. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2008a. Big Willow Creek Assessment and Temperature Total Maximum Daily Load. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2008b. Potlatch River Subbasin Assessment and TMDLs. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2009. Jordon Creek Subbasin Assessment and Total Maximum Daily Load. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2010a. Portneuf River TMDL Revision and Addendum. Boise, ID: DEQ.

DEQ (Idaho Department of Environmental Quality). 2010b. Upper and Lower Henry's Fork Total Maximum Daily Loads: Addendum to the Upper Henry's Fork Subbasin Assessment and TMDLs. Boise, ID: DEQ.

DEQ and ODEQ (Idaho Department of Environmental Quality and Oregon Department of Environmental Quality). 2004. Snake River- Hells Canyon Total Maximum Daily Load (TMDL). Boise, ID: DEQ.

DEQ and USFS (Idaho Department of Environmental Quality and U.S. Forest Service). 2010. Bear Valley Creek 4b Justification. Boise, ID: DEQ.

EPA (U.S. Environmental Protection Agency). 1993. Clark Fork-Pend Oreille Basin Water Quality Study: A Summary of Findings and a Management Plan. EPA 910/R-93-006, e54.

EPA (U.S. Environmental Protection Agency). 2000. Ambient Water Quality Criteria Recommendations: Rivers and Streams in Nutrient Ecoregion III. Washington, DC: EPA, Office of Water.

EPA (U.S. Environmental Protection Agency). 2002. Summary of Biological Assessment Programs and Biocriteria Development for States, Tribes, Territories, and Interstate Commissions: Streams and Wadeable Rivers. Washington, DC: EPA, Office of Environmental Information and Office of Water.

EPA (U.S. Environmental Protection Agency). 2005. Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act. July 29, 2005. Available at http://www.epa.gov/owow/tmdl/2006IRG/report/2006irg-report.pdf.

Fore, L.S. 2000. Using Diatoms to Assess the Biological Integrity of Idaho Rivers. Seattle, WA: Statistical Design. Report prepared for Idaho Department of Environmental Quality.

Grafe, C.S., ed. 2002. Idaho River Ecological Assessment Framework: An Integrated Approach. Boise, ID: Idaho Department of Environmental Quality.

Grafe, C.S., C.A. Mebane, M.J. McIntyre, D.A. Essig, D.H. Brandt, and D.T. Mosier. 2002. Water body assessment guidance, second edition—final. Boise, ID: Idaho Department of Environmental Quality.

Hall, J.C., and W.T. Hall. 2009. Critical evaluation of EPA stream nutrient standard initiatives. Environment Reporter 40 ER 1593, 17 pp.

Herlihy, A.T., and J.C. Sifneos. 2008. Developing nutrient criteria and classification schemes for wadeable streams in the conterminous US. Journal of the North American Benthological Society 27(4):932–948.

Lackey, R.T. 2003. Nutrient addition to restore salmon runs: Considerations for developing environmental protection policies and regulations. In Nutrients in salmonid ecosystems, J.G. Stockner, ed., 283–285. American Fisheries Society Symposium 34. Bethesda, Maryland.

Madsen, J.D. and D.H. Smith. 1997. Vegetative Spread of Eurasian Watermilfoil Colonies. Journal of Aquatic Plant Management 35:63–68.

Madsen, J.D., and R.M. Wersal. 2008. Assessment of Eurasian Watermilfoil (Myriophyllum spicatum L.) Populations in Lake Pend Oreille, Idaho for 2007. Mississippi State, MS: Mississippi State University, Geosystems Research Institute. Report number 5028.

Madsen, J.D., and R.M. Wersal. 2009. Aquatic Plant Community and Eurasian watermilfoil (Myriophyllum spicatum L.) Management Assessment in Lake Pend Oreille, Idaho for 2008. Mississippi State, MS: Mississippi State University, Geosystems Research Institute. Report number 5032.

PSU (Portland State University). 2006. Idaho Pend Oreille River Model, Model Development and Calibration. Portland, OR: PSU, Maseeh College of Engineering and Computer Science, Department of Civil and Environmental Engineering. Technical Report EWR-02-06.

Rosgen, D. 2006. Watershed assessment of river stability and sediment supply (WARSSS). Fort Collins, CO: Wildland Hydrology.

Smith, A.J., and C.P. Tran. 2010. A weight of evidence approach to define nutrient criteria protective of aquatic life in large rivers. Journal of the North American Benthological Society 29(3):875–891.

Smith, C.S. and J. W. Barko. 1990. Ecology of Eurasian Watermilfoil. Journal of Aquatic Plant Management 28:55–64.

Stevenson, R.J., B. Hill, and A.T. Herlihy. In press. A comparison of approaches for establishing nutrient criteria based on algal attributes in mid-Atlantic streams. 20 pp.

Stockner, J.G., E. Rydin, and P. Hyehstrand. 2000. Cultural oligotrophication: Causes and consequences for fisheries resources. Fisheries 25(5):7–14.

Thomas, S.A., K.E. Bowman, C.D. Myler, and G.W. Minshall. 1999. Origin and Fate of Water Quality Factors Affecting the Ecological Integrity of the Teton River. Pocatello, ID: Idaho State University, Stream Ecology Center.

TSWQC (Tri-State Water Quality Council). 2009. Water Quality Status and Trends in the Clark Fork-Pend Oreille Watershed for the 1984–2008 Period. Available at http://www.tristatecouncil.org/documents/TSWQC1984-2007TrendsReport-Final_Jan2009.pdf

USGS (U.S. Geological Survey). 2000. Comparability of Suspended Sediment-Concentration and Total Suspended Solids Data. Reston, VA: USGS. USGS Water-Resources Investigations Report 00-4191.

Woolf, Tom. 2011. Personal Communication. Idaho State Department of Agriculture.

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Attachment A: Supporting Information Regarding Pend Oreille River Assessment Units

The following sections (1–10) capture details on the Pend Oreille River assessment units. This attachment includes much of the basis for the Idaho Department of Environmental Quality's (DEQ's) responses to comments regarding the Pend Oreille River. Individual sections are referenced in specific responses in the preceding table. At the end of this attachment are references cited specific to the Pend Oreille River.

1. Introduction

DEQ's proposed delisting of total phosphorus (TP) as a cause of impairment to the Pend Oreille River is based on a thorough analysis of all existing and readily available data recently collected on the Pend Oreille River. This analysis included a comparison of all existing Tier I TP data with numeric interpretations of the narrative standard, detection and quantification of visible periphytic and epiphytic algae growth, an evaluation of rooted aquatic plants, an evaluation of dissolved oxygen (DO) profiles, and modeling. Results of this evaluation suggest the following:

- Lentic targets of 0.009 milligrams per liter (mg/L) (average) and 0.012 mg/L (instantaneous) of the *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of the Pend Oreille Lake, Idaho* (DEQ 2002, hereafter referred to as the Pend Oreille Lake Nearshore Nutrient TMDL) are not appropriate in evaluating beneficial use status of the Pend Oreille River.
- There is a decreasing trend of TP concentrations in the river over time.
- The Pend Oreille River system phosphorus loading appears to be at equilibrium with plant and algae uptake at current loading rates.
- While there are localized areas of concern for nonnative plants, there is much diversity in the native aquatic plant community in the river.
- Beneficial uses as related to TP in the river are fully supported.

TP was added as a "cause" to the 2008 Integrated Report by seemingly reliable data taken in 2003 and 2004 by a third party. That data showed one sample exceeding the TP concentrations thought to be protective of beneficial uses in the nearby waters (e.g., targets in an immediately upstream Pend Oreille Lake Nearshore Nutrient TMDL). Upon our own analysis of the data, DEQ has concluded the 2003–2004 data is informative but not of sufficient quantity or quality to be the basis for assessment; therefore, the original basis for the listing was appropriate at the time, but given what we know now, it seems incorrect.

2. History of Pend Oreille River Integrated Report Events

TP was added to the U.S. Environmental Protection Agency (EPA)-approved 2008 Integrated Report. In addition to TP, the other causes (pollutants) of cold water aquatic life impairment on the 2008 report are temperature (water) and total dissolved gas supersaturation. The previous causes of impairment from the 2002 Integrated Report included "other flow regime alterations" and "sedimentation/siltation." In 2008, "other flow regime alterations" and "sedimentation/siltation" were delisted with "flaws in original listing" as the basis.

Staff recollections from the 2008 Integrated Report assessment process indicate that DEQ received water quality data collected in 2003–2004 along with a request from Tri-State Water Quality Council (TSWQC) to nominate TP as a cause of impairment to the Pend Oreille River (TSWQC 2004a). These data were provisional and preceded the final report. The 2004 DEQ evaluation of this seemingly reliable data indicated nutrients may be impairing beneficial uses, because one TP concentration exceeded values believed to impair beneficial uses in the nearby waters (e.g., targets in an immediately upstream Pend Oreille Lake Nearshore Nutrient TMDL and the suggested EPA Ecoregional Criteria) (TSWQC 2004a). The submitted data for the Pend Oreille River were also reported to show an increasing trend of TP concentrations. Therefore, TP was added as a "cause" to the 2008 Integrated Report. This assessment did not include a link to beneficial use impairment in the river to the TP concentrations.

3. Applicable Total Phosphorus Target Concentrations

Understanding the correlation between TP concentration and beneficial use impairment goes beyond evaluating TP concentrations, which is why state water quality standards typically do not include a numeric TP criterion. Idaho, along with most other state water quality standards, includes a narrative statement for protecting waters from excess nutrients: "Surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses" (IDAPA 58.01.02.200.06).

The original inclusion of TP as a cause of impairment to the Pend Oreille River was based on data compared to the Pend Oreille Lake Nearshore Nutrient TMDL TP primary target concentration of 0.009 mg/L (DEQ 2002). This target is a numeric interpretation of Idaho's narrative nutrient standard defining a seasonal limit to protect beneficial uses in the nearshore areas of Pend Oreille Lake during the critical summer months (i.e., latter half of July, August, and first half of September). This period is when the lake is most vulnerable to the impact of excessive nutrient loading. The primary target of 0.009 mg/L represents an *average* concentration throughout the nearshore waters. The TMDL also has a secondary target of 0.012 mg/L that represents an *instantaneous* concentration used to evaluate isolated conditions represented by grab samples collected during routine monitoring. These lentic targets in the Pend Oreille Lake Nearshore Nutrient TMDL were never evaluated for impact on designated beneficial uses, particularly in the lotic waters of the Pend Oreille River. Through the course of the analysis described below, both targets were determined to be inappropriate for use in the Pend Oreille River. Nevertheless, the 0.012 mg/L TMDL target was used as a starting point from which DEQ could evaluate TP data collected in the Pend Oreille River.

In addition to the narrative statement, Idaho's water quality standards have numeric criteria for DO, which excess TP can affect. DO concentrations must be above 6 mg/L at all times, with some exceptions for lakes and reservoirs.

4. Existing Water Quality Monitoring Data

In 2009–2010, DEQ conducted a multipronged evaluation of existing Tier I data to understand the correlation between TP concentrations and beneficial use support in the Pend Oreille River. This evaluation included a data comparison with numeric interpretations of the narrative standard, the detection and quantification of visible slime and epiphytic algae growth, an evaluation of rooted aquatic plants, an evaluation of DO profiles, and modeling. The following sections outline DEQ and other data considered while assessing the Pend Oreille River.

4.1. 2003–2004 Tri-state Water Quality Council Data

In 2003 and 2004, surface water quality monitoring was conducted by TSWQC contractors on the Pend Oreille River. A report was prepared from these data (TSWQC 2005). Grab samples were collected from 5 stations for 4 events (20 total samples) in open water near developed areas on the Pend Oreille River. A quality assurance project plan (QAPP) for the study was developed but not completely followed nor reported (TSWQC 2004b). Quality control (QC) was not performed or reported on field precision.

The 2003–2004 data submitted by the TSWQC were utilized in the assessment leading to the 2008 Integrated Report. At the time, these data were believed to be creditable. However, upon further review, DEQ found the data lacked the QC required to qualify it as Tier I data. Reclassified as Tier II, the data do not have the rigor and relevance necessary to make beneficial use support assessments for Idaho’s Integrated Report. Additional mistakes in the 2008 Integrated Report analysis of these data included the following:

- An evaluation of TP data outside the critical summer months as defined in the Pend Oreille Lake Nearshore Nutrient TMDL (DEQ 2002)
- An inappropriate comparison of TP data to the Pend Oreille Lake Nearshore Nutrient TMDL primary target of 0.009 mg/L (DEQ 2002)
- An improper assessment of the relevance of nearshore TMDL targets with beneficial use support in the river

DEQ does not base listing decisions solely on TP concentrations. While we have dismissed the appropriateness of using the nearshore TMDL targets for the Pend Oreille River, the Pend Oreille Lake Nearshore Nutrient TMDL was a starting place for DEQ to evaluate the 2003–2004 data submitted by the TSWQC. Comparing the 2003–2004 monitoring data with the 0.009 mg/L TMDL target was inappropriate. The 0.009 mg/L TMDL primary target represents an *average* concentration throughout the nearshore waters of Pend Oreille Lake and is not intended for grab samples at individual locations, such as those taken by TSWQC in 2003–2004. Therefore, the TMDL secondary target of 0.012 mg/L was a better place to start in evaluating the TSWQC data, realizing that the 0.012 mg/L target still has not been linked to beneficial use support.

When DEQ compared the 2003–2004 TSWQC data to the TMDL secondary target of 0.012 mg/L, 19 of the 20 samples were below the 0.012 mg/L grab-sample target. A single sample was above the target and was 0.020 mg/L. This single sample is likely to be an outlier because it is not representative of critical summer months, and this sample was collected in June when the variability of suspended particles can greatly affect TP analysis results. Without appropriate QC, it is hard to know if water TP concentrations were 0.020 mg/L or if a floating particle was included in the sample. During high flow events, more sediment, organic matter, and other materials are suspended in the water column, and the variability in the percentage of material from sample to sample may be significant (USGS 2000). In addition, because the 2003–2004 data were reported without quality assurance analysis, even though a QAPP had been developed, we have no basis for the reliability of this value or others collected during those years.

4.2. 2009 DEQ Data

During the 2009 field season, DEQ collected water quality samples and made beneficial use observations. The samples were collected following strict quality assurance/quality control procedures as documented in the project QAPP (DEQ 2009). The monitoring goals were as follows:

1. Measure 2009 summer nutrient concentrations and evaluate beneficial use status of the Pend Oreille River from the railroad bridge to Idaho/Washington state line.
2. Measure periphyton from reference and noted impaired areas in order to relate nutrient concentrations to impairment.
3. Provide additional calibration information for future planned CE-QUAL-W2 modeling.

Prior to 2009, no effort was made to make the necessary link between TP in the Pend Oreille River with beneficial use impairment. The lentic targets in the Pend Oreille Lake Nearshore Nutrient TMDL are desired conditions and are based on anecdotal information that indicated an increasing trend in nuisance algae growth in the nearshore areas. However, the targets identified in the TMDL have not been evaluated for impact on designated beneficial uses, particularly in the lotic waters of the Pend Oreille River. DEQ's monitoring in 2009 focused on the lotic waters of the Pend Oreille River, which are believed to react differently to TP loading than the lentic Pend Oreille Lake. DEQ believes data collected in 2009 is the best data set upon which to base the current beneficial use support status of the Pend Oreille River. The data have not been incorporated into a citable report, but the sampling and QC information has been presented to stakeholders and the public. The findings do not indicate high TP concentrations nor impairment of beneficial uses.

As mentioned previously, the 2009 monitoring was conducted following a QAPP (DEQ 2009). Compliance with data quality objectives was evaluated and reported. Consequently, the 2009 data is Tier I data, upon which beneficial use assessments can be made. The 2009 monitoring was based on a water quality monitoring design that would be representative of the three Pend Oreille River assessment units. These assessment units include waters between Pend Oreille Lake and the Idaho/Washington state line. Assessment unit ID17010214PN002_08, which begins at the Pend Oreille Lake outlet and extends to the confluence with Priest River, flows for 32.56 miles, is up to 2 miles wide, and is, on average, 25 to 30 feet deep during full pool. This assessment unit has a base flow between 8,000 and 13,000 cubic feet per second (cfs).

The water quality monitoring design included collection and laboratory analysis of monthly samples at 10 stations and the detection and quantification of visible slime growths and nuisance aquatic growth. Five of the shoreline stations were selected for anticipated maximum epiphytic algae growth and representativeness of poorer conditions on the river. To date, no one, including the authors of the nearshore TMDL (DEQ 2002), has made the connection between water quality and dense areas of epiphytic algae growth. Therefore, these stations were purposely selected in shoreline areas where nonflowing water or rooted aquatic plants were expected in order to find a relationship between TP concentrations and excess epiphytic algae growth. These stations are not representative of the assessment unit.

Total Phosphorus

An analysis of 2009 TP concentrations indicated concentrations below 0.012 mg/L in all but 4 of the 38 grab samples (Table 1). Three of these "exceedances" took place in July in locations not representative of the Pend Oreille River: Half Circle, Murphy Bay, and Riley Bay. The fourth exceedance occurred in Riley Bay in August.

Table 1. Total phosphorus concentrations measured by the Idaho Department of Environmental Quality in 2009

	Total Phosphorus (milligrams/liter)										
	Half Circle	Albeni Falls Forebay	Downstream Springy Point	Laclede	Murphy Bay	Oxbow	Riley Bay	Railroad Bridge	Riverside	Upper Priest River	**Average All**
June[a]	0.0069	0.0117	0.0059	0.0075	0.0088	0.0119	0.0086	0.0117	0.0066	0.0069	0.0087
July	0.0311	0.0101	0.0076	0.0079	0.0125	--	0.0215	--	0.0099	0.0079	0.0136
Aug	0.0073	0.0088	0.0043	0.0041	0.0043	0.0074	0.0132	0.0057	0.0060	0.0060	0.0067
Sept	0.0068	0.0059	0.0043	0.0055	0.0041	0.0079	0.0074	0.0041	0.0057	0.0058	0.0058

[a] June concentrations did not meet precision data quality objectives and are presented for comparison only.

The June 2009 sampling event did not meet field precision data quality objectives because the duplicate (0.0034 mg/L) and original sample (0.0117 mg/L) were significantly different and likely the result of a TP-sorbed particle making it into one sample but not the other; therefore, this sampling event should not be considered. June sampling will always be a challenge for the Pend Oreille River because the normal, natural suspended particle concentrations are higher because of runoff within the watershed. In the future, ortho-phosphorus or another soluble phosphorus analysis should be considered to accompany June TP sampling to better understand phosphorus. Relatively high TP results in June should always be given less weight in determining representative Pend Oreille River TP concentrations.

Algae

The detection and quantification of visible slime growths and nuisance aquatic growth was critical in evaluating whether designated beneficial uses were impaired and whether the "exceedances" of the nearshore target were applicable to the Pend Oreille River. DEQ attempted to quantify epiphytic algae within the Pend Oreille River using tile pieces placed at the shoreline stations, but there was not enough material to conduct an actual assay. Therefore, DEQ conducted a qualitative analysis of epiphytic algae growth. Results indicated a range within the low levels of detection. Almost all stations had "very low" levels of epiphytic algae growth and "none" to "low" levels of periphytic algae growth, even at the shoreline sites on the river in July where the TMDL "exceedances" were expected (Tables 2 and 3). This important information helped in making the conclusion that beneficial uses were supported, and the Pend Oreille Lake Nearshore Nutrient TMDL targets were inappropriate for evaluating the Pend Oreille River—even in the shoreline stations portion of the river.

Table 2. Observed epiphytic algae growth—Pend Oreille River 2009

Station Name	June	July	August	September
HC—Half Circle	None	None	None	None
MB—Murphy Bay	None	None	None	None
OB—Oxbow	None	None	Very Low	None
RB—Riley Bay	None	None	None	None
RS—Riverside	None	None	Very Low	Very Low

Table 3. Observed periphytic algae growth—Pend Oreille River 2009

Station Name	June	July	August	September
HC—Half Circle	None	None	Very Low	Very Low
MB—Murphy Bay	None	None	None	None
OB—Oxbow	None	None	Very Low	Very Low
RB—Riley Bay	None	None	None	Very Low
RS—Riverside	None	None	Low	Very Low

Dissolved Oxygen

DO profiles were collected at all stations during most events. Equipment malfunction prevented collection during all events. Stations were generally iso-saturated, and only a few showed very weak DO and temperature stratification during certain events. This finding means that DO concentrations at the stations were all very similar throughout each station’s depth and at equilibrium with the air at the air/water interface. All open channel DO measurements were greater than Idaho’s water quality criterion of a minimum of 6.0 mg/L. Summary statistics on observed DO concentrations were as follows: minimum of 8.11 mg/L, mean of 9.21 mg/L, and maximum of 9.81 mg/L.

4.3. Washington Department of Ecology Data

Since 1975, TP data during the critical summer months have been collected by Washington Department of Ecology on the Pend Oreille River downstream from the Idaho/Washington border. Data from this period of record was downloaded and compared to upstream data collected by DEQ and TSWQC. Results of the DEQ analysis indicated that TP concentrations during the critical summer months (July–September) have been less than or equal to 0.011 mg/L since 2000 (Figure 1). During the productive season (July–September) when higher TP concentrations are likely to negatively affect beneficial uses, concentrations were all lower than 0.012 mg/L. These concentrations are consistent with what has been reported upstream in Idaho. From this data, Washington Department of Ecology has determined that TP concentrations in the Pend Oreille River at Newport are protective of designated beneficial uses and that “Overall water quality at this station met or exceeded expectations and is of lowest concern” (Washington Department of Ecology 2011).

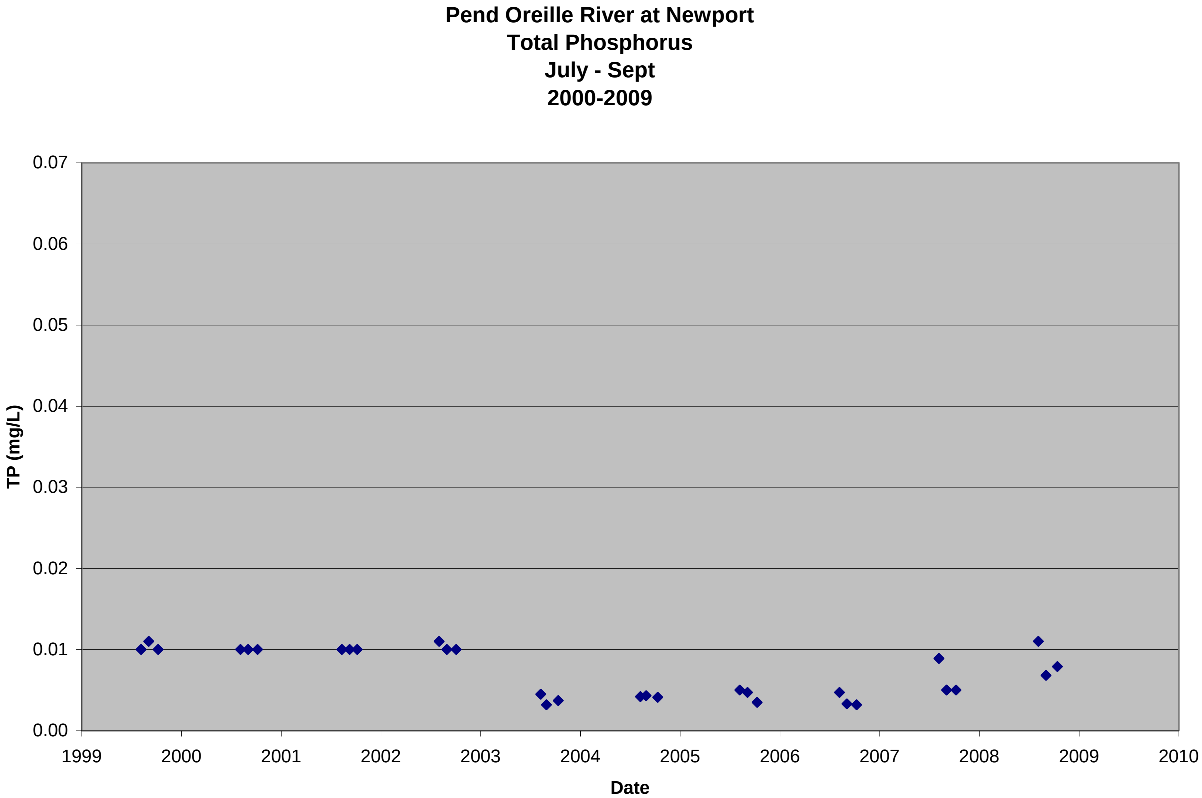


Figure 1. Washington Department of Ecology July–September total phosphorus concentrations at Newport, 2000–2009

5. Information on Aquatic Plants

Aquatic plants are essential in promoting the diversity and function of aquatic ecosystems (Madsen and Wersal 2009). Researchers are concerned as to whether invasive, nonnative plants such as Eurasian watermilfoil have invaded Pend Oreille River to the extent that native species have been excluded along the river. Although the Pend Oreille County Public Utility District #1 has documentation as early as the 1980s on Eurasian watermilfoil problems in the Pend Oreille River, Idaho has taken an aggressive approach towards eradicating this nonnative species since 2006. As a result, there has been a significant decrease in the species in the river (Personal communication, Tom Woolf, ISDA, 2011). DEQ looked at recent data collected in the Pend Oreille River to better understand the condition of the aquatic plant communities of the river for any evidence of beneficial use impairment in the river.

In 2007, aquatic plant distribution and abundance data were collected by milfoil researchers of Mississippi State University using the point intercept method. Data were collected along the entire length of the Pend Oreille River in Idaho. The study concluded that Eurasian watermilfoil was present throughout the river (Figure 2); however, researchers concluded there is still excellent diversity and abundance of native plants in the Pend Oreille River ecosystem—adequate to sustain the structure and function of an aquatic littoral ecosystem (Madsen and Wersal 2008).

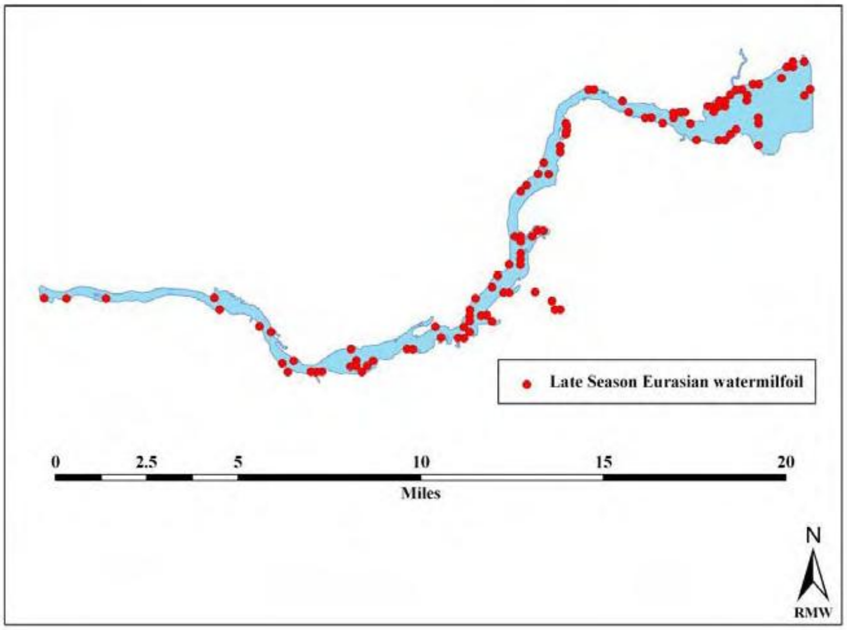
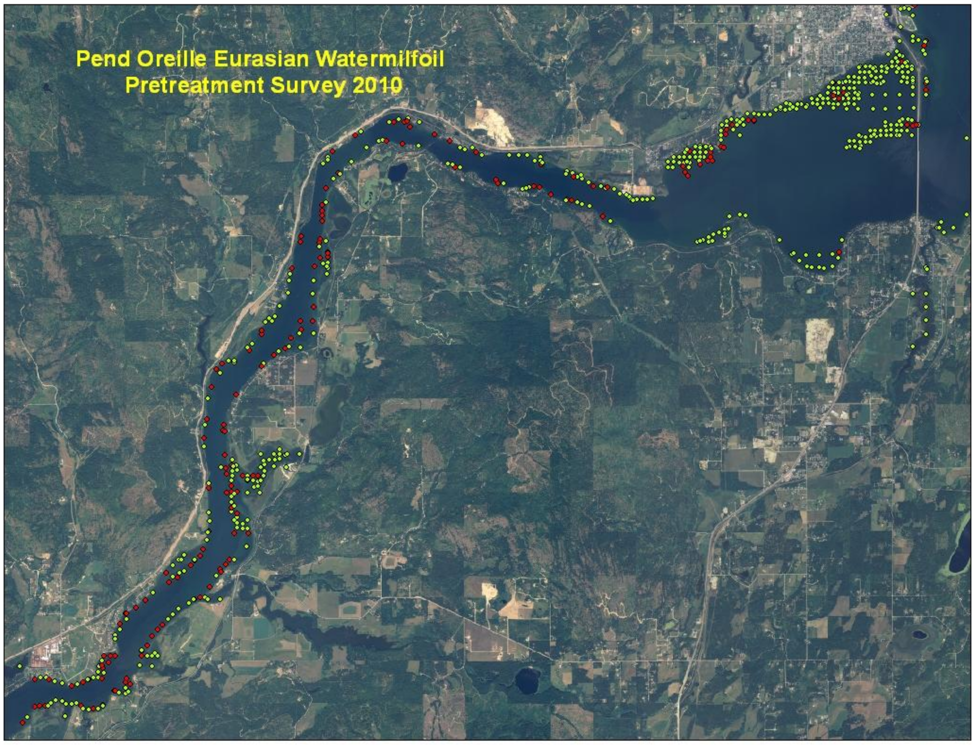


Figure 2. The locations of Eurasian watermilfoil during the late season littoral zone survey of the Pend Oreille River, Idaho (Madsen and Wersal 2008)

In 2008, the same survey was repeated by Mississippi State University to understand temporal changes in the aquatic plant community within the river. They concluded that there continued to be a stable, diverse native aquatic plant community within the Pend Oreille River, and the presence of Eurasian watermilfoil had decreased from 2007 to 2008 in response to herbicide treatment conducted in 2007 (Madsen and Wersal 2009).

In 2010, an increase in watermilfoil was observed throughout the river (Figure 3), and there are localized areas within the river where a monoculture of milfoil is present. The increase is believed to have three causes: 1) a re-invasion of areas previously treated with herbicide, 2) limited drawdown of Pend Oreille Lake in winter 2009, and 3) the growth of milfoil in areas on the Pend Oreille River where flow rates preclude successful treatment of the plant (Personal communication, Tom Woolf, ISDA, 2011). Nevertheless, there is still good diversity in native plant species throughout the river system, and public use is not inhibited on the river due to the presence of watermilfoil (Personal communication, Tom Woolf, ISDA, 2011). This important information helped in making the conclusion that beneficial uses were supported in the river.



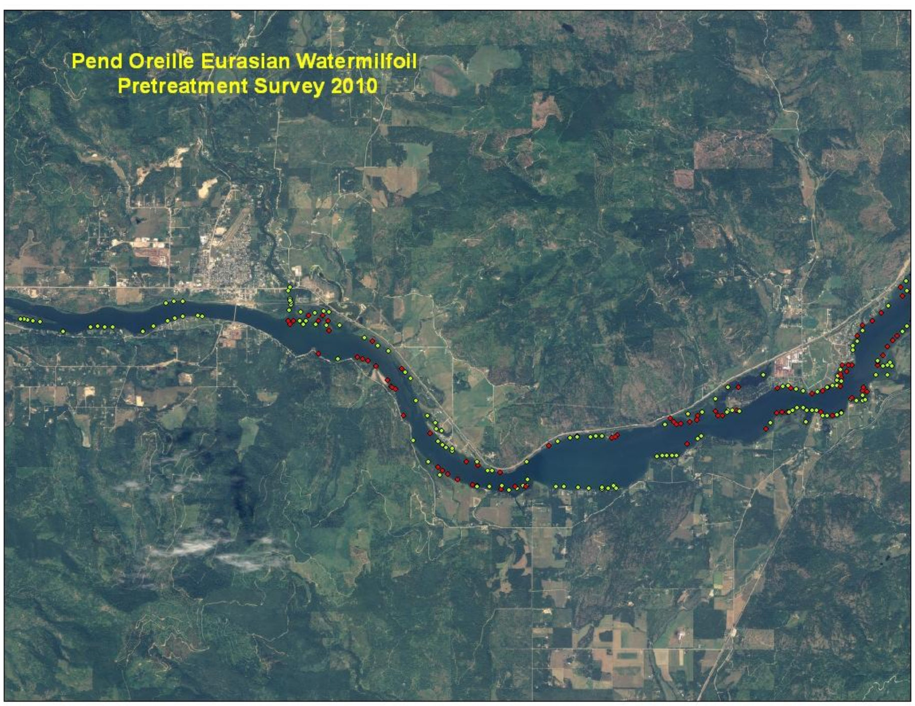


Figure 3. Two images showing locations of Eurasian watermilfoil detected in the Pend Oreille River, Idaho, in 2010. Red dots are detection points (Personal communication, Tom Woolf, ISDA, 2011).

6. Information on Hydrology/Climate

To better understand the river flow conditions during the years when TP data was collected (2003–2004 and 2009) and how they relate to flows within the period of record, a comparison of hydrologic and climatologic data was performed using the Natural Resources Conservation Service's (NRCS) Idaho water supply outlook reports, National Oceanic and Atmospheric Administration (NOAA) climate and precipitation data, and U.S. Geological Survey (USGS) mean daily and mean monthly river flow data on the Pend Oreille River at Newport, Washington. DEQ determined that the Pend Oreille River gage at Newport is representative of the Idaho Pend Oreille River when Pend Oreille Lake is held at consistent elevation, which occurs from mid-July through the end of August each year (Figure 4). Flows outside this period may be influenced by Albeni Falls dam operations. The period between mid-July and the end of August is also the most productive period for algae growth and the most likely time for beneficial use impairment. The results of the hydrologic/climate analysis is presented below.

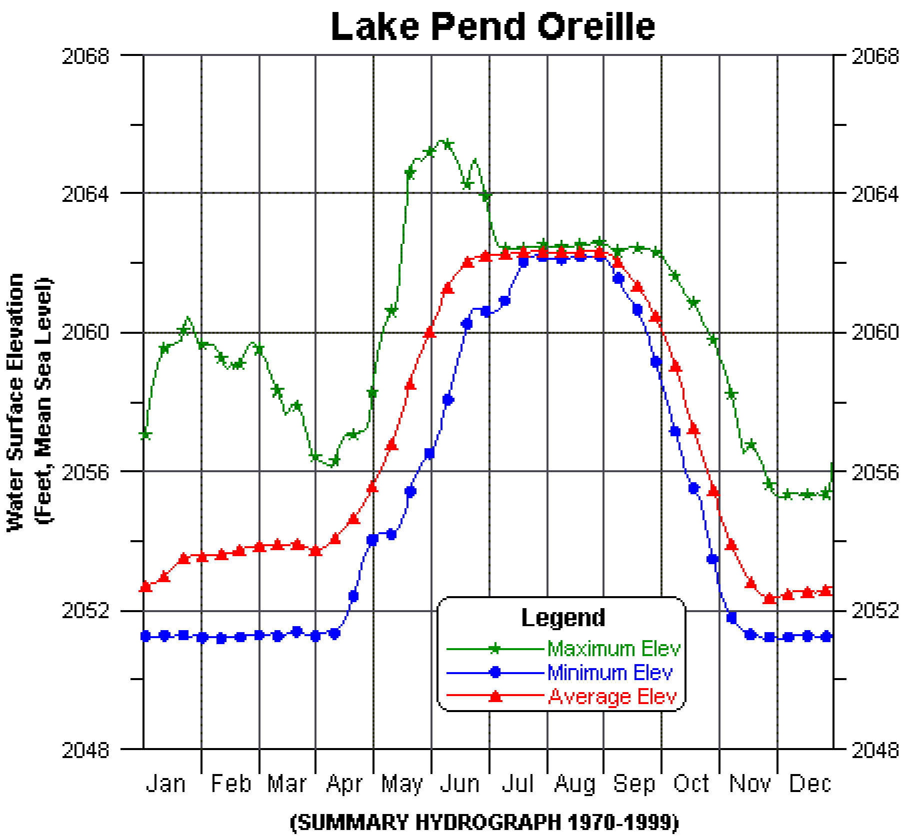


Figure 4. Lake Pend Oreille summary hydrograph (USACE 2011)

Flow in June 2009, which was higher than previous years, likely led to a general perception that 2009 was a high water year. However, our analysis suggests that all of 2009, especially July and August, represented a normal water year. In 2009, snowpack was at 95% of average for the Pend Oreille River watershed. By June 1, Pend Oreille Lake was 86% of summer pool. Due to moderate spring temperatures and above-average precipitation, it was anticipated that snowmelt would be prolonged and streamflow extended into the summer months. Temperatures into the 80s (°F) in late May and the beginning of June followed by almost an inch of rain caused a quicker-than-expected snowmelt and a sharp jump in streamflow in early June. This increase in flow was observed on the Pend Oreille River at Newport as well, where a 10,000 cfs increase occurred between May 23 and June 3 (Figure 5). This increase may be the basis of the perception that 2009 was a high water year. However, in the following months, temperatures were in the 80s and 90s and there were only a few isolated rain events, conditions that translated to a small increase in flow in the Pend Oreille River at Newport. As such, there was a normal decline in flow observed in the Pend Oreille River in comparison with other years of concern. For the whole year, flows in the Pend Oreille River at Newport were below the 50th percentile compared to flows for the period of record at that site (Figure 5).

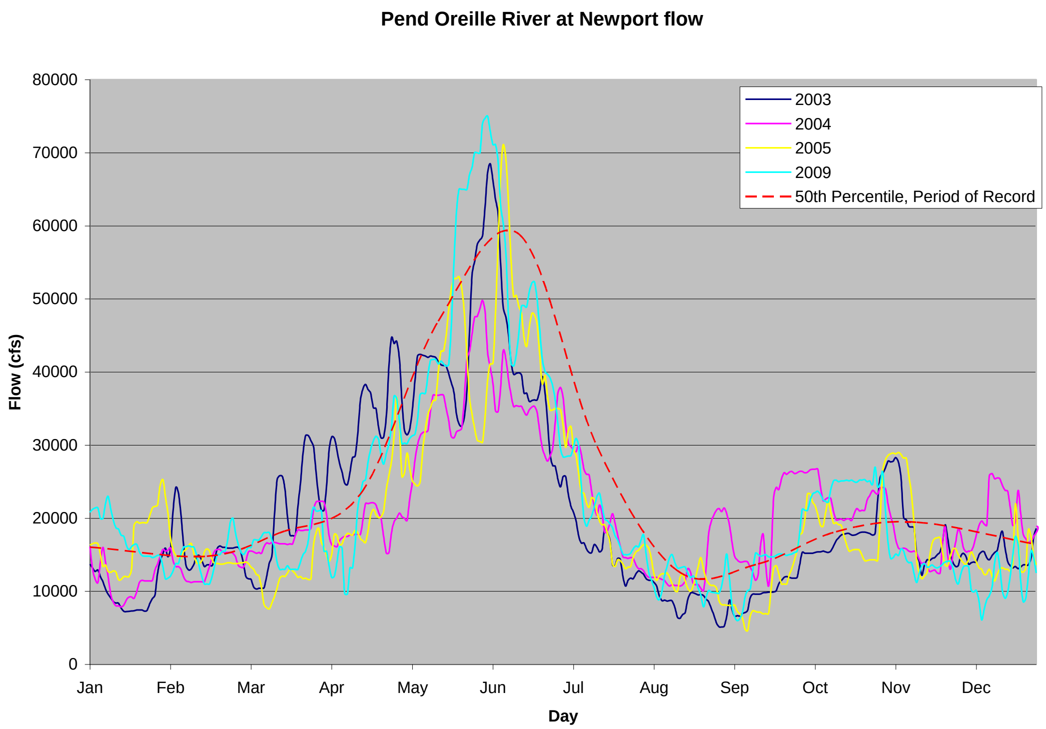


Figure 5. Pend Oreille River flow at Newport

A second analysis looked at the distribution of mean monthly flows in the Pend Oreille River during the years TP data were collected (2003–2004 and 2009) as they relate to mean monthly flows for the period of record. DEQ used the mean monthly flows recorded at the USGS gage at Newport, Washington, for the period of record (1903–2009). Only flows in 2003 could be considered unique and more characteristic of critical conditions because they fell entirely within the 1st quartile (Table 4) of the mean monthly flows for the period of record. Mean monthly flows in June through September 2009 were not indicative of a higher-than-average flow year; flows were within the 2nd/3rd quartile of mean monthly flows for the period of record (1903–2009). This distribution of data is similar to the distribution of flow data in 2005, which also fell in the 2nd/3rd quartiles (Table 4). Flows during August and September 2004 were the only flows that were above average, as they fell within the 2nd/3rd and 4th quartile (Table 4).

Table 4. Relative distribution of mean monthly flows

	Pend Oreille River at Newport Quartile[a]			
	June[b]	July	Aug	Sept [b]
2003	1	1	1	1
2004	1	2/3	2/3	4
2005	2/3	2/3	2/3	1
2009	2/3	2/3	2/3	2/3

[a] Quartiles: 1 = 0–25th percentile, 2/3 = 26th–75th percentile, 4 = 76th–100th percentile
[b] The Newport gage may over- or underestimate flows in June and September

Additional analysis was performed that looked at long-term trends or unique flow patterns. Deseasonalization of data is accomplished by subtracting monthly means from each year's monthly average flow to create a residual. The residual can be either positive or negative and can be interpreted as above or below the average flow for the period of record. The residuals are then plotted against the period of record to graphically depict trends or unique flow patterns (Figure 6). According to deseasonalization analysis, 2009 did not prove to be a high water year, nor was it unique or trending from average.

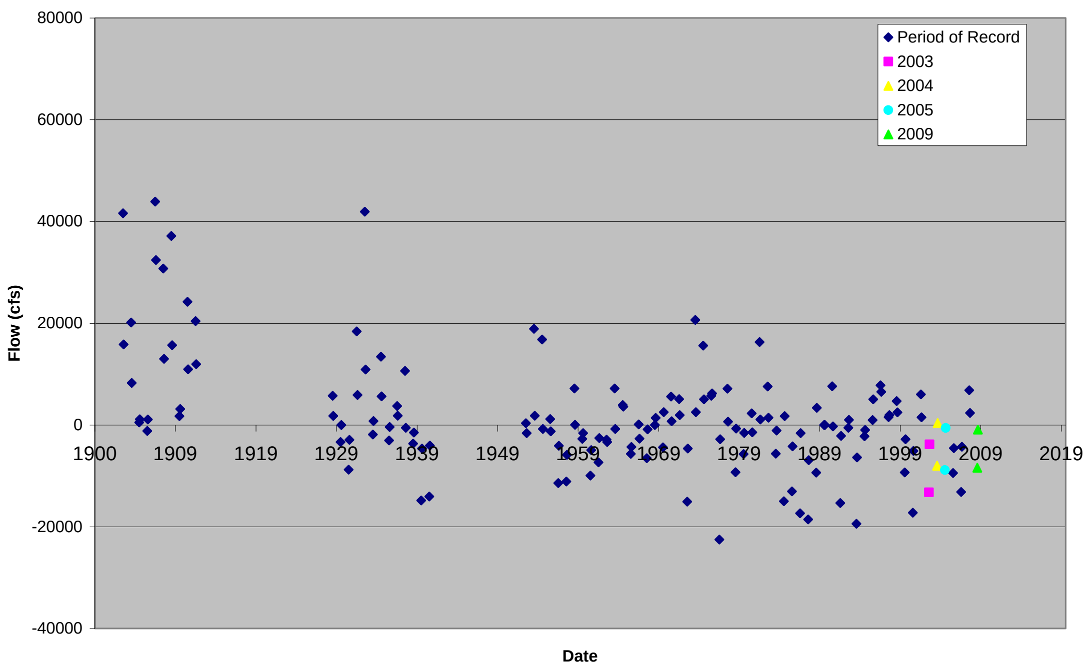


Figure 6. Deseasonalized July and August residuals of flows in the Pend Oreille River

To determine whether the flow in the Pend Oreille River at Newport is representative of flows in the river above Albeni Falls dam, DEQ tested the hypothesis that at summer pool, if there was a response in the hydrograph to a rain event, then flow above summer pool was transported across the dam and the site would be representative. NOAA climatic data (at the Sandpoint Experiment Station) and NRCS snowpack data (from NRCS water supply outlook reports for the Panhandle region) were analyzed to determine if the gage at Newport is representative of the Pend Oreille River upstream of Albeni Falls dam. It was determined from this analysis that the Newport gage responds to rain events; therefore, DEQ finds the gage at Newport representative of the Pend Oreille River upstream of Albeni Falls dam from mid-July until the end of August.

In 2003, snowpack in the Pend Oreille Lake watershed was 95% of average and 115% of average in the Priest Basin. Record high temperatures in the end of May 2003 produced high snowmelt rates and streamflow. The high snowmelt and rain in May translated to 80–90% storage in Pend Oreille Lake and a sharp increase in flow at the USGS gage in the Pend Oreille River at Newport.

In June 2003, 1.6 inches of rainfall was recorded at the Sandpoint Experiment Station Climate Station. This event translated into an increase in flow in June in the Pend Oreille River at the Newport USGS gage. With no rainfall in July and 0.6 inches of rainfall in August, a steady decline in flow the following summer months was observed at the USGS gage in Newport (Figure 7).

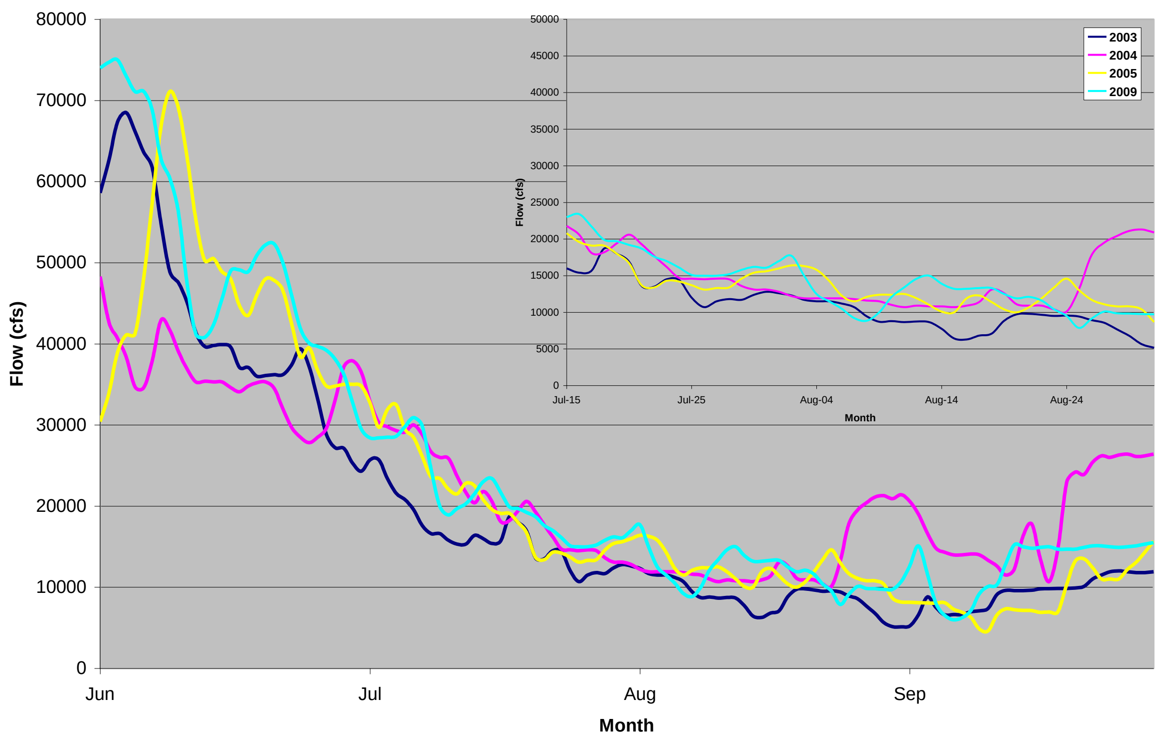


Figure 7. Flow of Pend Oreille River at Newport

Flow data from 2004 show a similar response to runoff and precipitation events. In 2004, snowpack was 60% of average in the Panhandle region of Idaho—the lowest snowpack in the region since 2001. In the Pend Oreille basin, snowpack was 64% of average. Because of this shortage, base flow levels were predicted to be reached earlier than normal and remain below normal for the rest of the summer. However, monthly precipitation in May was 156% of average in the Panhandle region of Idaho, increasing the water year-to-date precipitation to 90% of average—the same as 2003. As such, Pend Oreille Lake was at 84% of summer level by the end of May, and flows in the Pend Oreille River at Newport increased. At the Sandpoint Experiment Station Climate Station, 2.1 inches of rainfall was recorded in June, and another 0.5 and 4.1 inches were recorded for the months of July and August, respectfully. These precipitation events translated into significantly increased flow at the USGS gage on the Pend Oreille River at Newport, Washington (Figure 8).

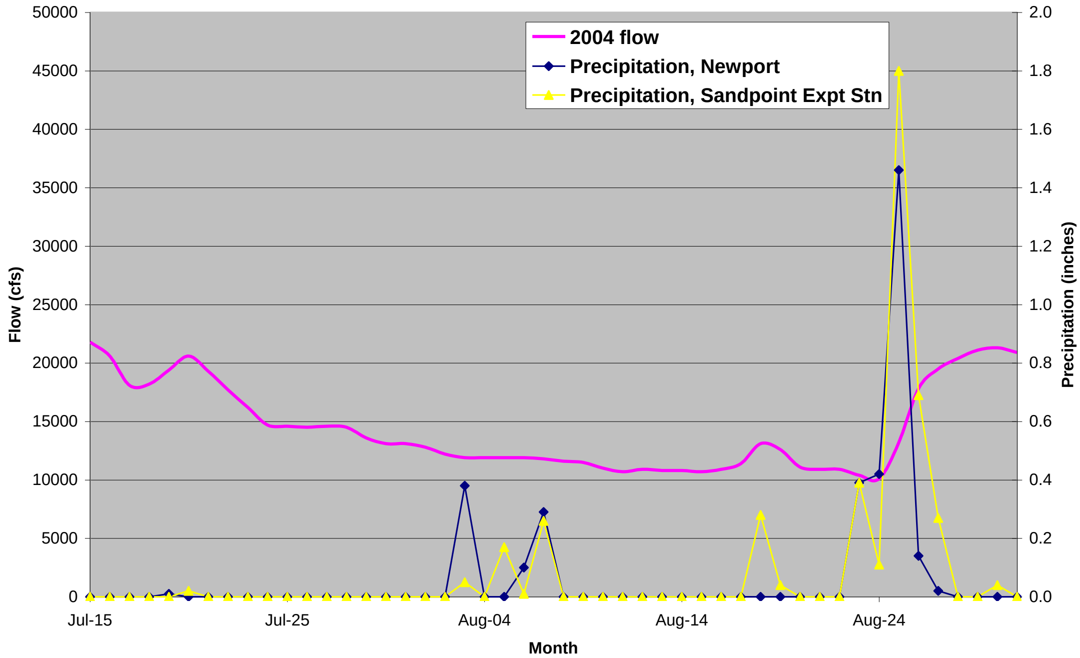


Figure 8: Example flow response to precipitation events in the Pend Oreille River at Newport

Although above-average rainfall (107% of average) fell in the Panhandle region of Idaho in May 2005, it was after snowpack had all but disappeared except in the highest elevations since snowpack was only 15% of average in 2005. Despite the May rainfall, streamflow was at 35–65% of average in the Panhandle region of Idaho. There were questions about whether the need to maintain higher water levels in Lake Pend Oreille would dampen any response to precipitation events below the dam. Much-needed rainfall came in June and July when 3.6 and 1.6 inches of rain, respectively, were recorded at the Sandpoint Experiment Station Climate Station. It is suspected that the 5,000 cfs increase in flow in June in the Pend Oreille River at Newport was the response to this precipitation (Figure 7). At the same climate station, 0.7 inches of rainfall was recorded in August, which resulted in a small increase in the hydrograph at Newport.

7. Information on the Trends in Total Phosphorus

The original listing in the 2008 Integrated Report was also based on information that suggested an increasing trend in TP concentrations in the Pend Oreille River. In TSWQC's report on the data, *Pend Oreille River Water Quality Monitoring Summary of Findings* (2005), they state that "based on the limited data from this study, levels of TP in the Pend Oreille River, Idaho, appear to have a minor increasing trend from the outlet of Lake Pend Oreille to the Idaho-Washington border." Upon our further analysis of the data, the suggested increasing trend was only a spatial increase, not a temporal increase, and it lacked statistical significance.

Water quality and TP concentration trends have been evaluated in a recent TSWQC report, *Water Quality Status and Trends in the Clark Fork-Pend Oreille Watershed for the 1984–2008 Period* (TSWQC 2009). This report summarizes data collected in the Clark Fork-Pend Oreille Basin over a 10-year period from 1998–2007 by the TSWQC. Data analyzed for this report was collected by Washington Department of Ecology just downstream of the Idaho/Washington border at Newport and further downstream at Metaline Falls. They specifically looked at data between June 15 and September 15 between the years of 1984 and 2008. The trends report concluded, "Total phosphorus data on the Pend Oreille River at Newport and Metaline Falls suggest decreasing trends from 1998 to 2007." They reported a 4.8% decrease in TP, but they site outliers and a change in detection limit that may have skewed this result (Figure 9).

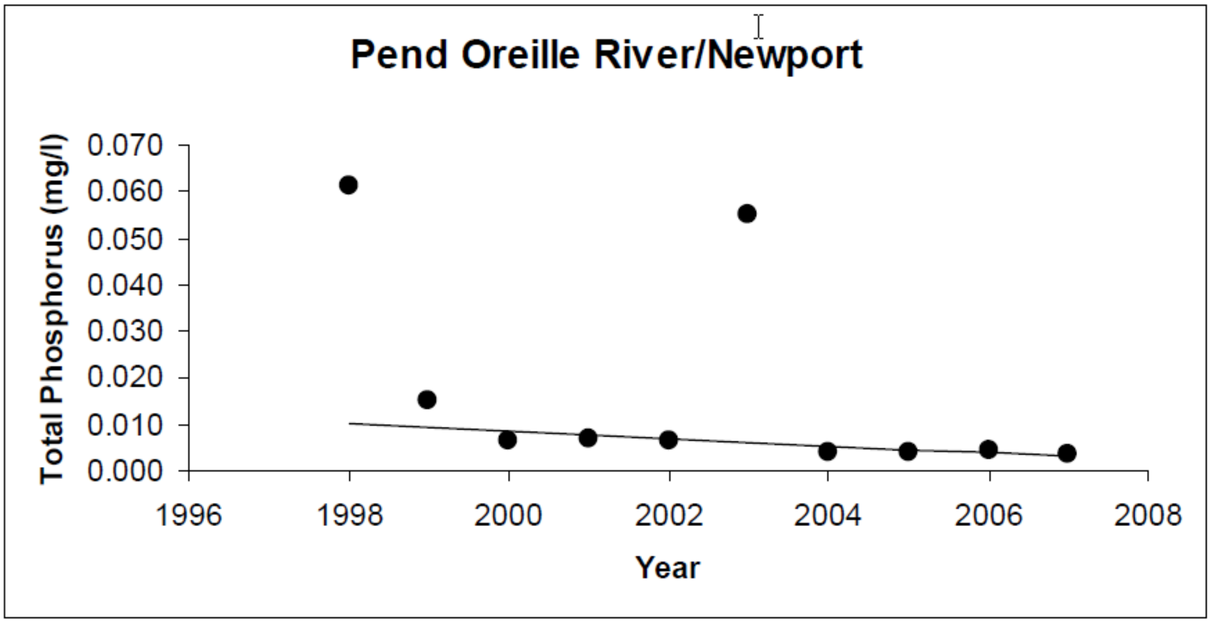


Figure 9. Pend Oreille River at Newport—total phosphorus (decreasing trend); Figure 4-12 from TSWQC 2009

To address the issues of detection limit and outliers put forth in the TSWQC report, DEQ conducted a trend analysis on the same TP data collected between June and September by Washington Department of Ecology at Newport; however, rather than analyze data since 1998, we did it for the period of record (1975–2009). As cited in the TSWQC report, detection limit changes may have skewed their results, as three different laboratory methods were used for TP analysis during the period of record. In addition, detection limits became lower with time due to better technology. Therefore, DEQ adjusted the data set to have the detection limit of the least sensitive method (0.010 mg/L). It was evident from these data that the outliers discussed in the TSWQC report were during the month of June—a month with high variability in TP. Therefore, DEQ segregated the data set by month. Results of the analysis showed that TP concentrations during the critical summer months (July–September) have been less than or equal to 0.011 mg/L since 2000. In addition, there is a decreasing trend of TP concentrations over the period of record during the months June–September (Figure 10). When analyzing the data since 1990, a decreasing trend still exists (Figure 11). When looking at the deviation from the average TP concentration for the month, the deviation decreases over the period of record. After 2002, TP concentrations were primarily below the average (Figure 12).

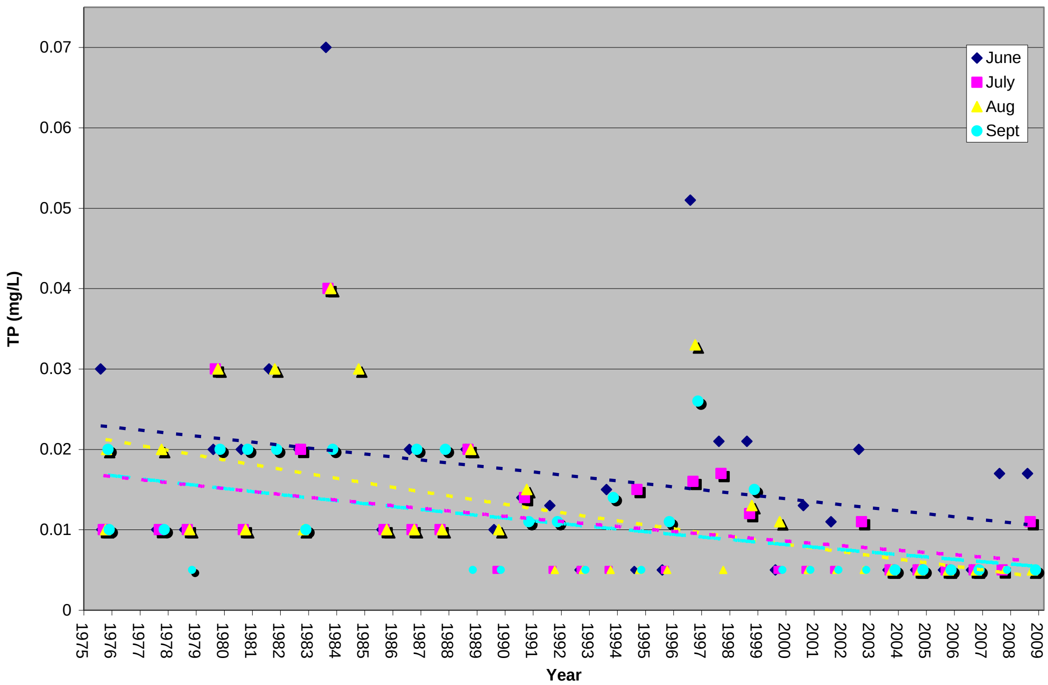


Figure 10. Total phosphorus—Pend Oreille River at Newport, Washington, 1975–2009

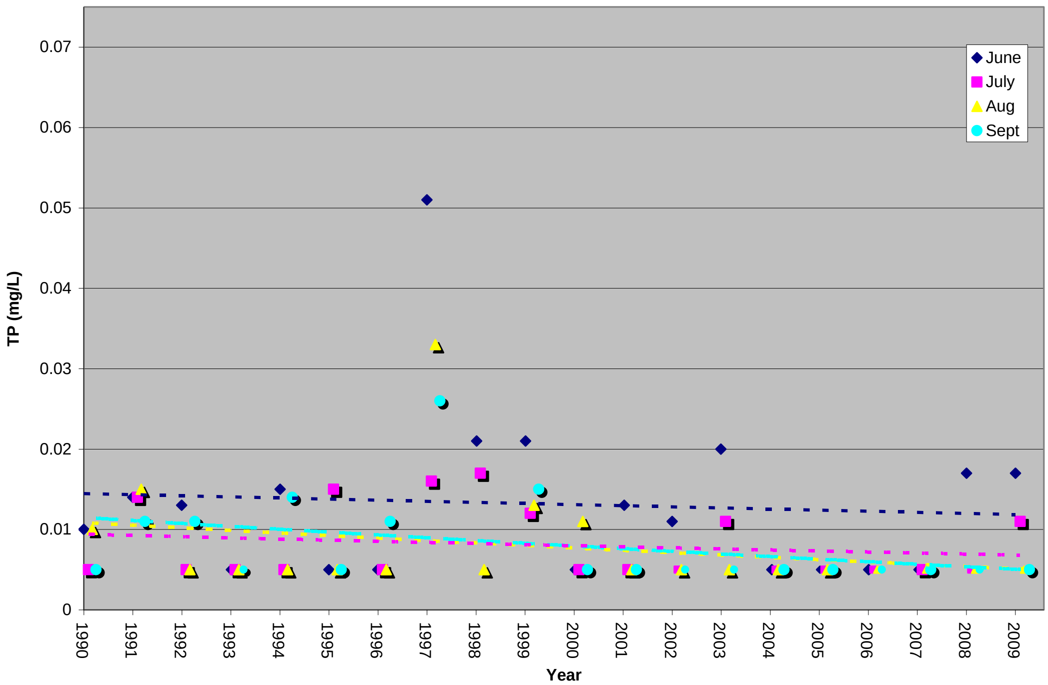


Figure 11. Total phosphorus—Pend Oreille River at Newport, Washington, 1990–2009

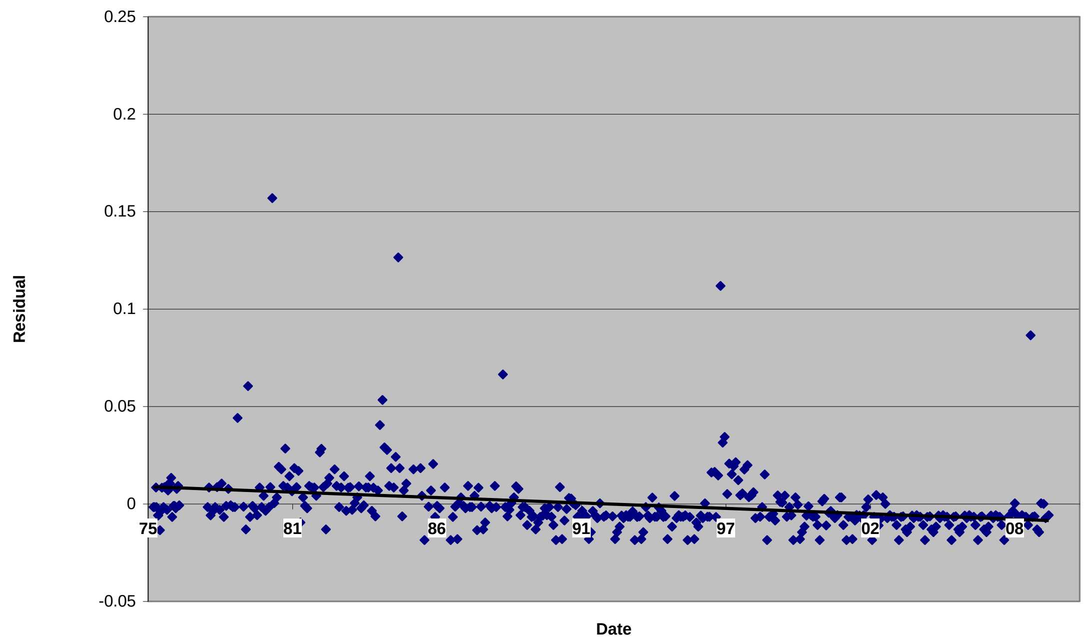


Figure 12. Total phosphorus—Pend Oreille River at Newport, deviation from monthly average

8. Modeling of Dissolved Oxygen

Another way TP can be considered to be in excess is when it reduces DO. TP can exceed the Idaho water quality standards designated beneficial use of aquatic life when it is in concentrations that cause excess algae, which then decays and ultimately results in reduced DO. The 2009 monitoring results (section 4.2) indicate that DO concentrations were above 8.11 mg/L during the critical summer months—levels supportive of aquatic life use. In addition, modeling performed by Portland State University (PSU 2006) shows that a calibrated simulation of DO concentrations above Albeni Falls never fall below 7.5 mg/L. Modeling provides a second demonstration that reduced DO is not likely occurring in the Idaho reaches of the Pend Oreille River.

9. Current Modeling efforts

DEQ and EPA are working on additional modeling. The fact that additional modeling is planned should not be confused as a line of evidence of impairment.

The purpose of the additional modeling is to assist with validation of future permits and describe the Pend Oreille River's pH characteristics. DEQ and EPA are working with dischargers to develop permits that protect water quality and plan for the future. The model would be used to test future loading scenarios to ensure continuing protection of beneficial uses, while using 2009 conditions as a benchmark. DEQ is also looking at pH to determine the driving parameters to changes in pH.

10. Discussion/Conclusions

Based on monitoring conducted by DEQ during June, July, August, and September of 2009 and the other information provided in this paper, DEQ has made the following conclusions:

- Representative Pend Oreille River total phosphorus concentrations are low (typically below 0.012 mg/L).
- In 2009, neither epiphytic nor periphytic algae were observed in concentrations that prevent recreation or aquatic use attainment in the Pend Oreille River.
- Pend Oreille River dissolved oxygen concentrations are protective of beneficial uses.
- There is good diversity in native plant species throughout the river system, and public use is not inhibited on the river due to the presence of Eurasian watermilfoil or any other nonnative, rooted aquatic plant.
- A valid assessment can be made from 2009, which was a climatically representative year. Mean monthly flows in June through September 2009 were not indicative of a higher-than-average flow year; 2009 flows were within the 2nd/3rd quartiles of mean monthly flows for the period of record (1903–2009).
- Total phosphorus data on the Pend Oreille River at Newport and Metaline Falls suggest significant decreasing trends in concentrations over time.

Today's best available data suggest that TP concentrations are not causing beneficial use impairment in the Pend Oreille River. Therefore, DEQ continues the proposal to delist TP as a cause of impairment to the Pend Oreille River on the 2010 Integrated Report.

References

DEQ (Idaho Department of Environmental Quality). 2002. Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho. Submitted by Idaho Department of Environmental Quality, Boise Idaho. Prepared by Tetra Tech Inc., in cooperation with the Tri-State Water Quality Council, Sandpoint Idaho. Available at http://www.deq.idaho.gov/media/464368-water_data_reports_surface_water_tmdls_pend_oreille_lake_ns_pend_oreille_ns_nutrient_entire.pdf.

DEQ (Idaho Department of Environmental Quality). 2009. Pend Oreille River 2009 Water Quality Monitoring, Quality Assurance Project Plan (QAPP). Prepared by Robert Steed and Valena Berry. Boise, ID: DEQ.

Madsen, J.D., and R.M. Wersal. 2008. Assessment of Eurasian Watermilfoil (Myriophyllum spicatum L.) Populations in Lake Pend Oreille, Idaho for 2007. Mississippi State, MS: Mississippi State University, Geosystems Research Institute. Report number 5028.

Madsen, J.D., and R.M. Wersal. 2009. Aquatic Plant Community and Eurasian watermilfoil (Myriophyllum spicatum L.) Management Assessment in Lake Pend Oreille, Idaho for 2008. Mississippi State, MS: Mississippi State University, Geosystems Research Institute. Report number 5032.

PSU (Portland State University). 2006. Idaho Pend Oreille River Model, Model Development and Calibration. Portland, OR: PSU, Maseeh College of Engineering and Computer Science, Department of Civil and Environmental Engineering. Technical Report EWR-02-06.

TSWQC (Tri-State Water Quality Council). December 31, 2004a. Letter from Diane Williams, Executive Director TSWQC, to Ed Tulloch, Water Quality Manager Idaho Department of Environmental Quality, with subject "303(d) Listing Nomination—Pend Oreille River.

TSWQC (Tri-State Water Quality Council). 2004b. Pend Oreille River Water Quality Monitoring Program Quality Assurance Project Plan, Revision 1. Prepared by Tetra Tech, Inc. Available at http://www.tristatecouncil.org/documents/AppendixB_QAPP.pdf.

TSWQC (Tri-State Water Quality Council). 2005. Pend Oreille River Water Quality Monitoring, Summary of Findings. Prepared by Tetra Tech Inc. and DVS Environmental, Inc. Available at http://www.tristatecouncil.org/documents/05por_wqfindings.pdf.

TSWQC (Tri-State Water Quality Council). 2009. Water Quality Status and Trends in the Clark Fork-Pend Oreille Watershed: Time Trends Analysis for the 1984-2007 Period. Available at http://www.tristatecouncil.org/documents/TSWQC1984-2007TrendsReport-Final_Jan2009.pdf.

USACE (U.S. Army Corps of Engineers). 2011. Pend Oreille River Basin, Lake Pend Oreille Summary Hydrograph 1970-1999. Available at http://www.nwd-wc.usace.army.mil/nws/hh/basins/hopish.html

USGS (U.S. Geological Survey). 2000. Comparability of Suspended Sediment-Concentration and Total Suspended Solids Data. Reston, VA: USGS. USGS Water-Resources Investigations Report 00-4191.

Washington Department of Ecology. 2011. Aquatic Plant Monitoring Results for the Pend Oreille River. Available at http://www.ecy.wa.gov/apps/watersheds/aquaticplants/lakereport.asp?id=306.

Woolf, Tom. 2011. Personal Communication. Idaho State Department of Agriculture.