APPENDIX D—WILD AND SCENIC RIVERS EVALUATION

As part of the current resource management plan (RMP) revision process, the Little Snake Field Office (LSFO) has inventoried all potentially eligible Wild and Scenic River (WSR) segments within the planning area.

To determine segments' eligibility, the LSFO inventoried all potentially eligible rivers, including all rivers nominated by the public or that appeared on the Nationwide Rivers Inventory (NRI). All rivers within the planning area were reviewed by Bureau of Land Management (BLM) specialists to identify any additional rivers that might possess values making them potentially eligible for inclusion in the National Wild and Scenic River System (NWSRS).

As part of the current review, BLM also reviewed the eligibility and classification findings from the 1991 preliminary Wild and Scenic River Eligibility Study. An interdisciplinary (ID) team recommended the reconsideration of all the potentially eligible stream segments identified at that time, because of the time that had elapsed from the previous inventory and the advances that have been made in geographic information systems (GIS) technology.

In February and March of 2005, an overall review of potentially eligible rivers or river segments conducted. The potentially eligible river segments within the LSFO resource area were inventoried, and it was determined whether these segments were free-flowing. Each river segment was evaluated to determine if it had at least one outstandingly remarkable value (ORV) of regional and/or national significance (rare, unique, and/or exemplary) within a quarter-mile of the river's high water mark.

Based on this review of potentially eligible rivers/river segments, the BLM LSFO ID Team has established WSR eligibility determinations for segments of Beaver Creek (one segment), Vermillion Creek (one segment), and the Yampa River (three segments). These river segments have been tentatively classified as "wild," "scenic," or "recreational."

The purpose of the Wild and Scenic Rivers Act (WSRA) of 1968 is to protect and preserve designated rivers in their free-flowing condition, along with their immediate environments. Section 5(d) of the WSRA directs federal agencies to consider the potential for national wild, scenic, and recreational river areas during all planning for water resources development and related land resources development. This report describes the legal direction and authority for conducting the WSR evaluation, and summarizes the results of the preliminary eligibility evaluation conducted by the field office to determine if any rivers or river segments within the LSFO are eligible for designation as part of the NWSRS.

The results of the Draft Wild and Scenic River Eligibility Study have been reviewed by all interested parties, and comments and recommendations have been received from Mr. John Spezia, Vermillion Ranch, Moffat County, the Colorado State Land Board, and the Wilderness Society. The ID team reviewed and evaluated these comments for incorporation into this report. Many comments address the suitability of the eligible river segments (including land ownership, accessibility, need for special protection, and impact on existing uses, including water rights), and these comments will therefore be considered during the suitability phase of the process.

This final eligibility determination of WSRs for the BLM LSFO will become the basis for the second phase of the review process—suitability determination. The suitability phase of the review will occur as part of the LSFO Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS) process. As part of the ongoing revision of the *Little Snake RMP*, the LSFO will consider if the eligible segments of the identified rivers are "suitable" for recommendation to Congress for inclusion in the

NWSRS. In this review, the RMP will include a range of alternatives for possible designation. The Final RMP and Record of Decision (ROD) will identify as management actions the final determination and recommendation of rivers suitable for inclusion in the NWSRS. Any rivers or river segments found to be "suitable" will be managed to protect identified ORVs until Congress either approves or rejects the recommendation to include these rivers or river segments in the NWSRS. Only Congress can designate a WSR. Decisions in the RMP simply identify segments that are suitable for inclusion in the NWSRS and provide for management to preserve the values that make these rivers/river segments eligible.

1.1 WILD AND SCENIC RIVERS ACT

The WSRA (Section 5[d]) specifies that federal agencies complete an evaluation of the current status of watercourses within federal jurisdictions to determine whether these watercourses are eligible for

inclusion in the NWSRS. The evaluation process begins with an inventory of all river areas, a determination of their freeflowing nature, and consideration of any river-related ORVs that are regionally or nationally significant. Each potentially eligible river or river segment is tentatively classified as "wild," "scenic," or "recreational" based on the current level of human development associated with that river or river segment.

The eligibility process solicits public input and incorporates that into the Eligibility Study. After eligible sections have been identified and tentatively classified as "wild," "scenic," or "recreational," the evaluation moves to the suitability phase for further study and public involvement. The suitability phase is part of the RMP process, and draft suitability determinations made by BLM will be subject to public review in the Draft RMP/EIS. After consideration of public comments on the Draft RMP/EIS, BLM's final suitability recommendations will be included in the ROD for the RMP. Those rivers or segments BLM finds suitable for designation will subsequently be managed to protect their free-flowing nature and ORVs until Congress makes a decision on the BLM's recommendations. "It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes."

Wild & Scenic Rivers Act

Determinations of rivers or river segments as "suitable" are reported to Congress for final action. There is no specific deadline for completing this task; however, it is assumed that these determinations will be reported shortly after publication of the ROD for the RMP. Only Congress or the Secretary of the Interior, upon request by the State, can designate a river as part of the NWSRS.

1.2 FREE-FLOWING REQUIREMENTS

For a river or a river segment to be eligible for inclusion in the NWSRS, it must be free-flowing. The WSRA defines "free-flowing" rivers as having—

- **D** Existence in their natural condition
- **G** Flow in natural condition
- **G** Few impoundments
- Few diversions

- □ No straightening
- □ No rip-rapping
- □ No modifications such as channelization.

Instream impoundments or structures will not automatically preclude a river segment from consideration for inclusion, provided such exceptions will not be construed to authorize, intend, or encourage future construction of such structures within components of the NWSRS. The intent of the congressional actions and federal regulations is that rivers must be generally free-flowing but not completely without human modification.

1.3 OUTSTANDINGLY REMARKABLE VALUES

A river must have one or more ORVs to be eligible for inclusion in the NWSRS. Each value must be directly river-related (occurring within a quarter-mile of the river's high water mark); must exhibit rare, unique, and/or exemplary values within the geographic region; and must be determined to have regional or national significance. BLM Information Memorandum (IM) 2004-196 states that judgment should be used to determine if the ORVs are directly river-related: that ORVs "should be located in the river or on its immediate shore lands, contribute substantially to the functioning of the river ecosystem, and/or owe their location or existence to the presence of the river."

Potential ORVs are as follows:

- □ S: SCENIC—Diversity of view, special features, seasonal variations, cultural modifications
- □ **F:** FISH—Habitat quality, diversity of species, value of species, abundance of fish, natural reproduction, size and vigor of fish, cultural/historic importance, recreational importance, access
- □ **R**: RECREATION—Water-oriented (general length of season, flow, diversity of use), quality of experience, scenery/naturalness, access, level of use, associated opportunities, attractions, sites and facilities
- □ W: WILDLIFE—Habitat quality, diversity of species, abundance of species, natural reproduction, size and vigor of species, cultural/historic importance, recreational importance, access
- **G**: GEOLOGIC—Feature abundance, diversity of features, educational/scientific importance
- **H:** HISTORIC—Significance, educational/interpretation importance, listing/eligibility, site integrity
- □ C:CULTURAL—Significance, current uses, number of cultures, site integrity, education/ interpretation importance, listing/eligibility
- **E:** ECOLOGICAL—Species diversity, ecological function, rare communities, educational/scientific importance.

The size of a river is not a criterion of eligibility. To be eligible, rivers do not need outstanding whitewater or boatable segments. Water flow must be sufficient to sustain the ORV that makes a river or river segment eligible for consideration.

1.4 TENTATIVE CLASSIFICATION

Each river segment is tentatively classified as "wild," "scenic," or "recreational." Tentative classifications are based on the type and degree of human development associated with the river and adjacent lands, as these existed at the time of the evaluation.

The four key elements in evaluating tentative classification are—

1. Water resources development

- 2. Shoreline development
- 3. Accessibility
- 4. Water quality.

Applying these elements results in the following possible classifications:

- □ A "wild" river is free of impoundments, with shorelines or watersheds essentially primitive, and with unpolluted waters.
- □ A "scenic" river may have some development as well as road and railroad access points.
- □ A "recreational" river may have more extensive development along its shoreline, including transportation routes, and may have undergone some impoundment or diversion.

1.5 AUTHORITIES AND GUIDELINES

The following sources have been used and are referenced throughout this Wild and Scenic River Eligibility Study:

- □ Interagency Wild and Scenic Rivers Coordination Council, 1982
- □ The Nationwide Rivers Inventory (NRI) list
- □ NWSRS, www.nps.gov/rivers/publications.html
- □ U.S. Department of the Interior (USDI)/U.S. Department of Agriculture (USDA) Guidelines for Eligibility, Classification, and Management of River Areas, September 7, 1982
- □ Wild and Scenic Rivers Act, P.L. 90-542, as amended.
- Wild and Scenic Rivers Policy and Program Direction for Identification, Evaluation and Management, Bureau of Land Management Manual - 8351, 1992 and changes as of 1993. (Sections 1601.03, I; 1623.41A 2d) - Establishes BLM policy, program direction, and procedural standards for fulfilling requirements of the Wild and Scenic Act.
- □ BLM IM 2004-196, Clarification of Policy in BLM Manual Section 8351, Wild and Scenic Rivers, with respect to Eligibility Criteria and Protective Management, June 22, 2004.

2.0 ELIGIBILITY DETERMINATION BY BLM INTERDISCIPLINARY TEAM

2.1 HISTORY OF WILD AND SCENIC RIVER ELIGIBILITY PROCESS – BLM LITTLE SNAKE FIELD OFFICE

The Colorado Environmental Coalition protested the *Little Snake RMP* (1989) because it did not include a Wild and Scenic River Eligibility Study. In response to this protest, BLM committed to conducting a Wild and Scenic River Eligibility Study and initiating preplanning for it in January 1991. There was a Notice of Intent published in the *Federal Register* on April 18, 1991, and public scoping meetings and issue development were conducted between April 26, 1991 and June 14, 1991.

An ID team of BLM resource specialists conducted a technical analysis for the study, using established criteria based on the requirements of the WSRA. One hundred and eighty-one (181) stream segments in the resource area were inventoried and analyzed for potential eligibility. Seven stream segments on the Yampa River and one stream segment on the Little Snake River were found to be potentially eligible for designation. Preliminary Wild and Scenic classifications were identified with input from a River Advisory

Group consisting of special public interest groups and the public. The results of the 1991 review are included in Table D-1.

River Segment	Outstandingly Remarkable Values	Tentative Eligibility and Classification
Yampa River Segment 1	Recreation (boating) and fish	Recreational
Williams Fork to Milk Creek (~12 Miles)	(Colorado pikeminnow)	
Yampa River Segment 2	Recreation (boating) and fish	
Milk Creek area downstream to Duffy Mountain Tunnel area (~15.5 Miles)	(Colorado pikeminnow)	Scenic
Yampa River Segments 3, 4, & 5	Recreation (boating) and fish	
Duffy Mountain Tunnel area to Cross Mountain Canyon (~47 Miles)	(Colorado pikeminnow)	Recreational
Yampa River Segment 6	Scenic, recreation (boating), and	Wild
Cross Mountain Canyon (~3.5 Miles)	fish (Colorado pikeminnow)	VVIId
Yampa River Segment 7		
Cross Mountain Canyon to Dinosaur National Monument (~9 Miles)	Fish (Colorado pikeminnow)	Recreational
Little Snake River		
Moffat County Highway 318 to Yampa River Confluence (~9.5 miles)	Fish (Colorado pikeminnow)	Recreational

Table D-1. 1991 Wild and Scenic River Preliminary Eligibility Study Findings

The Wild and Scenic suitability study that would usually follow the determinations of eligibility was deferred because of potential planning and funding issues with the Yampa Valley Alliance planning effort, of which BLM was a participant. The Yampa Valley Alliance Outdoor Recreation Conceptual Plan (December 1992), which was prepared as part of this planning effort, addressed recreation opportunities, resource conservation, and economic development for the entire Yampa River Basin. This plan neither supported nor opposed the WSR designation.

The LSFO planned to proceed with the final part of the Wild and Scenic River Eligibility Study suitability analysis and report preparation—as staffing and funding became available. The analysis was to include landownership and use, potential uses, acquisition costs, ability to manage, conflicting rights, WSR values, and other issues. Funding was requested for completion of the study but was not made available until the current RMP revision was initiated in 2004.

Management actions to provide interim protection for BLM lands along the potentially eligible portions of the Yampa River were added to the 1989 ROD/RMP in response to the Colorado Environmental Coalition's protest. "The BLM will undertake no action nor permit any activities that could adversely affect or impact any outstandingly remarkable values of the Yampa River...Free-flowing characteristics of identified river segments cannot be modified, to the extent the BLM is authorized under law to control stream impoundments, diversions, or other development" (BLM 1989).

2.2 CURRENT RMP REVISION ELIGIBILITY EVALUATION

An ID team of BLM resource specialists was formed as part of the current RMP revision process to review previous Wild and Scenic River Study information and to update available information on rivers

in the LSFO area. The individuals on the ID team represent the following disciplines: archeology, wildlife biology, range management, solid minerals, recreation, lands and realty, visual resource management, riparian, GIS, and National Environmental Policy Act (NEPA)/planning. Table D-2 lists these individuals.

Name	Role
John Husband	Field Manager
Dave Blackstun	Associate Field Manager
Jeremy Casterson	Planning Lead
Jim McBrayer	Outdoor Recreation Planner
Rob Schmitzer	Outdoor Recreation Planner
Hal Keesling	Archeologist
Fred Conrath	Geologist
Rob Ernst	Geologist
Ole Olson	Soil, Water, Air Quality
Andrea Minor	Range Management Specialist
Tim Novotny	Wildlife Biologist
Pam Levitt	Geographic Information Systems

Table D-2. BLM Interdisciplinary Team

To determine eligibility, the LSFO inventoried all potentially eligible rivers, including all rivers nominated by the public and those that appear on the NRI, which includes the Yampa River, Little Snake River, Vermillion Creek, Fourmile Creek, and Spring Creek. All rivers within the planning area were mapped and reviewed by BLM specialists to identify any additional rivers or segments that might have values making them potentially eligible for inclusion in the NWSRS. The U.S. Geological Survey's (USGS) Hydro 5 GIS database was used to identify all streams crossing BLM public lands.

As part of the current review, BLM also reviewed the preliminary eligibility and classification findings from the 1991 study. The ID team recommended reconsideration of all identified potentially eligible stream segments because of the time that had elapsed from the previous inventory and advances in GIS technology.

2.2.1 Data Sources

The following sources were used in reviewing the streams within the LSFO:

- □ Maps of the LSFO area, at 1:100,000 scale
- □ NRI (National Park Service [NPS] 1995)
- □ American Rivers Outstanding List (Huntington and Echevarria May 1991)
- □ Rivers or river segments identified during the public scoping process
- □ Rivers or river segments identified by federal agencies, the State of Colorado, Native American tribes, local governments, and BLM LSFO specialists
- □ USGS GIS Hydro 5 database
- **BLM** records from the 1991 Preliminary Eligibility Study.

2.2.2 2005 Inventory

During the river inventory, there were 292 rivers or river segments identified in the LSFO (Attachment 1). These river segments include all rivers listed, nominated, or identified by the ID team or by other sources (including by State, tribal, or local governments, or by interested members of the public) and that flow perennially or have regular and predictable flows.

The ID team agreed on criteria to use for evaluation and eligibility. Stream segments that did not meet these criteria were dropped from further consideration as potentially eligible rivers or river segments. The ID team criteria for evaluation were as follows:

- **□** The river or river segment was free-flowing with no major impoundments.
- □ It had generally predictable flows of more than 2 weeks in a normal water year (not ephemeral, described in rationale below).
- □ The river or river segment had generally no less than a half-mile of BLM shoreline (based on viability of shorter segments in the WSR system).
- **D** Predominately BLM ownership along the length of the segment analyzed.

The rationale used to determine these criteria included the following:

- □ The BLM Wild and Scenic River Manual (Manual 8351, released 8/93).
- References used in determining whether a stream is ephemeral included the BLM Riparian Technical Reference (TR) 1737-9-1993 and the Glossary of Geology (Bates and Jackson, 1987): "A stream or reach of a stream which flows briefly, only in direct response to precipitation in the immediate locality and whose channel is at all times above the water table. Optional restriction: does not flow continuously during a period of as much as 1 month." The ID team modified this definition to include streams that do not flow continuously for a minimum of a 2-week period.
- □ A policy clarification in BLM IM 2004-196 indicates that ephemeral streams should not be considered: Wild and Scenic River eligible water courses "...are free-flowing and have associated ORVs... (and) should contain regular and predictable flows...should derive from naturally occurring circumstances...should not be ephemeral...should focus on normal water years..."
- □ BLM Manual 8351 (released 8/23/93) "In cases where a particular river segment is predominantly non-federal in ownership and contains interspersed BLM-administered lands, BLM shall evaluate only its segment as to eligibility and defer to the State or private landowner's discretion as to their determination of eligibility."

2.2.3 ORV Evaluation of Free-Flowing Rivers in the Little Snake Field Office

In February and March 2005, there was an overall review of potentially eligible rivers or river segments, conducted as part of the current RMP revision, to determine their free-flowing nature. The stream segments found to be free-flowing were then analyzed for any ORV that might exist and that could be carried forward to be tentatively classified for eligibility (See Attachment 1). The following describes the eligibility findings for all segments identified as eligible in the 1991 study and in the current review.

Little Snake River

The 1991 Preliminary Eligibility Study identified the Little Snake River as having one ORV related to a sensitive fish species, the Colorado pikeminnow. As a result of subsequent studies and monitoring by the Colorado Department of Wildlife (CDOW), "the Little Snake River is not within the designated critical habitat" for this species. Roehm (2004) cites the Little Snake River as within the range of the Colorado pikeminnow from the confluence with the Yampa River and then upstream to the Wyoming border;

however, this habitat was identified as marginal, with reduced flows being a significant factor. The last documented pikeminnow to be captured in the Little Snake River was in 1990 in southern Wyoming. The Little Snake River is not included within the U.S. Fish and Wildlife Service's designated critical habitat area for the Colorado pikeminnow. No other ORVs were found along this river segment.

Finding: Not eligible.

Yampa River

Williams Fork to Milk Creek segment

ORVs for the Williams Fork to Milk Creek segment include fish and recreation. The fish ORV for this segment was attributed to its being the designated critical habitat for the Colorado pikeminnow (Colorado River Endangered Fish Recovery Plan).

This segment also provides a critically important regional recreation opportunity for rare flatwater river floatboating, which attracts visitors to the geographic region. Other recreation opportunities in the river corridor include sightseeing, wildlife observation, camping, photography, hiking, and fishing.

Other Values. This segment of the Yampa River flows through Little Yampa Canyon, which was designated as a Special Recreation Management Area (SRMA) in the 1989 *Little Snake RMP* to provide unrestricted flatwater river floatboating in the region. The Little Yampa Canyon Recreation Area Management Plan (RAMP) was approved in 1996 to provide for public use, enjoyment, and protection of public lands within the planning area. Colorado State Parks manages public use along this segment of the river under a cooperative assistance agreement with BLM.

Finding: Eligible.

Milk Creek to Duffy Mountain Tunnel Area segment

ORVs for the Milk Creek to Duffy Mountain Tunnel area segment include fish and recreation. The fish ORV for this segment was attributed to its being the designated critical habitat for the Colorado pikeminnow.

This segment also provides a critically important regional recreation opportunity for rare flatwater river floatboating, which attracts visitors to the geographic region. Other recreation opportunities in the river corridor include sightseeing, wildlife observation, camping, photography, hiking, and fishing.

Other Values. This segment of the Yampa River flows through Little Yampa Canyon, which was designated as a SRMA in the 1989 *Little Snake RMP* to provide unrestricted flatwater river floatboating in the region. The Little Yampa Canyon RAMP was approved in 1996 to provide for public use, enjoyment, and protection of public lands within the planning area. Colorado State Parks manages public use along this segment of the river under a cooperative assistance agreement with BLM. BLM conducted the wilderness or roadless review of the area in 1998 and determined that the current SRMA management provides adequate protection of resource values.

Finding: Eligible.

West Duffy Mountain Tunnel area to east of Cross Mountain (three segments)

The free-flowing nature of the Juniper Canyon segment is questioned because of the Maybell Ditch Diversion Dam. Additionally, these segments are predominantly bordered by privately owned land. Therefore, eligibility determination will be deferred to the landowner's discretion, and these segments have been dropped from further consideration.

Finding: Not eligible.

Cross Mountain Canyon segment

ORVs for the Cross Mountain Canyon segment include fish, recreation, geology, and scenic values. The fish ORV for this segment was attributed to its being the designated critical habitat for the Colorado pikeminnow.

This segment also offers a critically important regional recreation opportunity for world-class whitewater boating, which attracts visitors to the geographic region. Other recreation opportunities along the river corridor include sightseeing, wildlife observation, camping, photography, hiking, and fishing.

Landforms and water combine to provide exemplary and notable scenic and visual features. The canyon is approximately 3.5 miles long and over 1,000 feet deep in places, with sheer cliffs. The environment is primitive and free of human structural and visual intrusions.

This segment of the Yampa River flows through a rugged canyon, which is a classic example of a superimposed river gorge eroded down thousands of feet into the Uinta Mountain Group in the core of the Cross Mountain anticline. Cross Mountain Canyon is a unique surface expression of one of the easternmost parts of the Uinta Mountain Uplift, which is the only east-west trending mountain range in the 48 contiguous States. Precambrian and Cambrian formations are exposed in the canyon. These formations have undergone only low-grade metamorphism and as a result have retained much of their original stratification and lithology. The canyon offers a rare opportunity for geologists from around the world to study these ancient sediments. In most cases, these sediments have undergone extensive medium-grade to high-grade metamorphism, which has altered their lithology and stratification, making their depositional history challenging to discern. The area near the mouth of the canyon is deeper than it is wide, and the canyon is bound on the west by a large, well-exposed fault zone with a vertical displacement of 5,000 feet. This displacement brings the upper Cretaceous sediments in contact with Mississippian Madison Limestone. Cross Mountain Canyon has many rare geologic features contained in a relatively small area, which gives it educational value (Conrath 2005).

Other Values. This segment of the Yampa River flows though the Cross Mountain Canyon Wilderness Study Area (WSA), which was recommended to Congress as suitable because of the area's naturalness and outstanding scenic values, and also because it provides a wide variety of primitive and unconfined recreation opportunities. The WSA is unique and harbors diverse populations of wildlife and threatened and endangered species, significant cultural and geologic features, and outstanding opportunities for solitude (BLM 1991).

Finding: Eligible.

Cross Mountain Canyon to Dinosaur National Monument segment

This segment is predominantly surrounded by privately owned land and has been dropped from further consideration.

Finding: Not eligible.

Canyon Creek

In the *Green River RMP*, the BLM Rock Springs Field Office identified scenic and historic ORVs for the upper portion of Canyon Creek in Wyoming: "The creek has steep slopes bordering the toe slopes of Pine Mountain, giving scenic contrasting views of geology and vegetation. The creek is along the route used by Western outlaws to reach hideouts in Brown's Park, Colorado, and adjacent to the diamond fields of the Great Diamond 'Hoax' at the base of Diamond Peak, just south of the Wyoming state line" (BLM 1996). In the *Green River RMP*, BLM determined that Canyon Creek was nonsuitable because of potential management conflicts and authorities. The aforementioned scenic and historic ORVs do not exist in the LSFO portion of Canyon Creek, which is located downstream and southeast of the Wyoming segment.

Finding: Not eligible.

Beaver Creek

An ORV for a unique fish population, Colorado River cutthroat trout, and habitat was identified in the Beaver Creek segment from the upper canyon to the Utah border. A Species of Special Concern to CDOW, Colorado River cutthroat trout are found in the upper portions of Beaver Creek. It is one of the few populations in Moffat County and is considered a "conservation population" of the Lake Nanita strain of Colorado River cutthroat trout, which is the purest stock available in Colorado. An effective natural barrier exists in Beaver Creek Canyon that prevents the invasion of brook trout located in the lower portions of the stream. The exact location of the barrier has not been identified (CDOW 2005). This segment of Beaver Creek is in a pristine area with no access roads or other development present. Because of the fish ORV, this river segment is tentatively eligible for inclusion in the NWSRS.

Finding: Eligible.

Vermillion Creek

One segment of Vermillion Creek, from Blue Hill Road downstream to a private-land boundary, was found to have cultural and geological ORVs. No ORVs were identified in any segments above or below this segment of Vermillion Creek.

Cultural ORV. Petroglyphs in the canyon on State- and BLM-administered public land in 10N., 101W., Section 36 are unique evidence of Basketmaker, Fremont, and Ute culture. The cultural value of this site makes it regionally significant (see Section 2.2.4 for definition); however, the area of the site within the State land parcel is closed to public use. A rare medicine wheel and associated rock art along Vermillion Creek 9N., 101W., Section 2 could make this site regionally significant for possible religious or astronomical ORVs. These and other sites have been recorded, but the area has not had a formal cultural survey. Sites might have been used concurrently by two or more cultural groups and have exceptional human interest value (Keesling 2005). The Irish Canyon Area of Critical Environmental Concern (ACEC) encompasses some of the most notable rock art in western Colorado (BLM 1989).

Geology. The Vermillion Creek segment flows through a spectacular canyon, which is the stream capture route leading away from Irish Canyon. The canyon dissects vertical dipping beds from the Cambrian Age to the Cretaceous Age, with a wide diversity of lithologies and textures. The outlet of the canyon is bound by a high-angle fault that brings Tertiary sediments in contact with Cambrian rocks. This segment has many outstanding geologic features within a relatively small area, which gives it educational value

(Conrath 2005). Vermillion Canyon is unique as an example of geomorphology cut by a small stream. The pre-Cambrian Uinta Mountain Group is also significant because it contains sediments that are more than 500 million years old. This geology is regionally significant because it is one of the easternmost exposures of the Uinta Mountain Group (Ernst 2005). The Irish Canyon area is one of the major landmarks in northwest Colorado and exhibits the most complete record of geologic history in the Uinta Mountain Group (BLM 1989).

Other Values. The Vermillion Creek segment flows though a portion of the Irish Canyon ACEC, which was so designated in the 1989 *Little Snake RMP* with the objective to protect the area's geologic values, cultural resources, scenic quality, and sensitive plants. Examples of three remnant plant associations that remain are in good condition, as well as Colorado BLM Sensitive Plant Species that occur within the unit (BLM 1989). An ACEC designation is not considered an ORV in itself; however, values associated with the river segment may be considered.

BLM conducted a wilderness inventory of Vermillion Basin in 2001 and determined that portions of the area (including public land portions of Vermillion Creek) contain wilderness characteristics that will be considered in the RMP revision.

Finding: Eligible.

Summary

Based on the 2005 review of rivers or river segments in the LSFO, there were five stream segments found to be eligible for WSR designation. Three segments of the Yampa River, one segment of Beaver Creek, and one segment of Vermillion Creek were determined to be free-flowing and have at least one regionally significant ORV (See Attachment 1 for a summary of all segments reviewed).

2.2.4 Region of Comparison/Level of Significance

The WSR planning process prescribes that resources must be reviewed for regional or national significance. An appropriate region of comparison is determined by the planning team, which is required to provide explicit definitions for the respective regions. The area, region, or scale of comparison are not fixed and should be the basis for meaningful comparative analysis, which could vary depending on the values under consideration. Typically, a "region" is defined on the scale of an administrative unit, a portion of a State, or an appropriately scaled physiographic or hydrologic unit. The approximate geographic region chosen for this analysis is the Upper Colorado River Plateau in northwest Colorado (north of U.S. Highway 40), which begins on the western slopes of the Rocky Mountains.

Ecological Subregions of the United States, produced by the US Forest Service in 1993, lists subregions and sections based on ecological units, and it provides a framework for classifying and mapping global areas based on ecological factors that change at different spatial scales (WO ECOMAP Team 1993). Ecological types and ecological units are developed at various scales by integrating multiple components such as climate, physiography, geology, soils, water, and potential natural vegetation (Forest Service Manual [FSM] 2060, Forest Service Handbook [FSH] 2090.11). The primary purpose for delineating ecological units is to identify land and water areas at different hierarchical levels that have similar capabilities and potentials for management.

Provinces within the ecological units are characterized by combinations of climate, geomorphic process, topography, and stratigraphy. Broad sections of the provinces share similar regional climate, geomorphic process, stratigraphy, geologic origin, and drainage networks (WO ECOMAP Team 1993).

The physiographic provinces that make up the northwestern part of Colorado within the LSFO include the Southern Rocky Mountain Steppe-Open Woodland-Coniferous Forest-Alpine Meadow province (M331) and the North-Central Highlands and Rocky Mountain province (M342). These provinces were considered as the regions of comparison for the Eligibility Study.

Each ORV was considered for each area listed in the region of comparison. The ID team then determined if the ORV was regionally and/or nationally significant or if the ORV possesses exemplary qualities. Rivers or river segments that did not have regional or national significance were dropped from further consideration.

2.2.5 Tentative Classification

The BLM LSFO ID Team has established WSR eligibility for portions of Beaver Creek, Vermillion Creek, and the Yampa River. The five river segments determined to be eligible for inclusion in the NWSRS have been tentatively classified, as summarized in Table D-3.

Table D-3. Eligible Wild and Scenic River Segments and Tentative Classification

River Segment	Tentative Eligibility and Classification
Beaver Creek	
Segment 1: From State land boundary in T. 11N., R. 103W., Section 10 to the Utah Border. Total length 5.0 miles (4.2 miles BLM, 0.8 miles State Land Board [SLB]).	Wild
Lower Vermillion Creek	
Segment 1: From BLM boundary in T. 9N., R. 101W., Section 2 to Bluehill Road/Sparks Fault in T. 10N., R. 100W., Section 30. Total length 3.9 miles (2.9 miles BLM, 1.0 mile SLB).	Scenic
Yampa River	
Segment 1: From BLM boundary at T. 5N., R. 92W., Section 9 (Williams Fork area) downstream to BLM boundary near the center of T. 5N., R. 92W., Section 7 (Milk Creek area). Total length 2.8 miles (1.9 miles BLM, 0.9 miles private).	Recreational
Yampa River	
Segment 2: From BLM boundary near the center of T. 5N., R. 92W., Section 7 (Milk Creek area), downstream to BLM boundary in the northwest corner of T. 6N., R. 93W., Section 32 (Duffy Tunnel area). Total length 15.9 miles (13.9 miles BLM, 2.0 miles private).	Scenic
Yampa River	
Segment 3: From BLM boundary on east side of Cross Mountain Canyon in the southwest corner of T. 6N., R. 97W., Section 7 downstream to BLM boundary on west side of Cross Mountain Canyon of T. 6N., R. 97W., Section 23. Total length 3.3 miles (3.3 miles BLM).	Wild

3.0 INTERFACES WITH AGENCIES WITH CONTIGUOUS BOUNDARIES

The LSFO consulted the BLM Vernal (Utah), Rock Springs (Wyoming), and White River Field Offices, the Routt National Forest, and the Dinosaur National Monument, regarding river segments that cross administrative boundaries.

3.1 BUREAU OF LAND MANAGEMENT

3.1.1 White River Field Office (Colorado)

The White River Field Office completed an RMP update in 1995, which identified the White River as suitable for inclusion in the NWSRS. This river segment does not connect to any river or river segment located within the LSFO; therefore, there is no connectivity issue with this determination.

3.1.2 Vernal Field Office (Utah)

The Vernal Field Office is currently in the RMP revision process and has released a Draft RMP/EIS. The Vernal Field Office has identified one segment of the White River as suitable for inclusion in the NWSRS. This river segment does not connect to any river or river segment located within the LSFO; therefore, there is no connectivity issue with this determination.

3.1.3 Rock Springs Field Office (Wyoming)

The Rock Springs Field Office completed the *Green River RMP* update in October 1997 that identified several segments of the Sweetwater River as suitable for inclusion in the NWSRS. This river segment does not connect to any river or river segment located within the LSFO; therefore, there is no connectivity issue with this determination. The RMP did identify the upper portion of Canyon Creek in Wyoming as eligible, but did not recommend it for designation. Values identified in the Wyoming portion of Canyon Creek are not found in the Colorado portion.

3.2 U.S. FOREST SERVICE

3.2.1 White River National Forest

The White River National Forest completed a Revised Land and Resource Management Plan in 2002 that identified segments of the Colorado, South Fork of the White, Crystal, Deep Creek, and Cross Creek Rivers as suitable for inclusion in the NWSRS. These river segments do not connect to any river or river segment located within the LSFO; therefore, there is no connectivity issue with these determinations.

3.2.2 Routt National Forest

The Routt National Forest completed a Revised Land and Resource Management Plan in 1998 that identified segments of the Elk and Encampment Rivers as suitable for inclusion in the NWSRS. Although the Elk River flows through northwestern Colorado, it does not cross any BLM-administered land before the river's confluence with the Yampa River; also, the Encampment River does not connect to any river or river segment located within the LSFO. Therefore, there is no connectivity issue with these determinations.

3.3 DINOSAUR NATIONAL MONUMENT

The Dinosaur National Monument has identified segments of the Green and White Rivers as eligible for possible designation as part of the NWSRS. The Yampa River connects with the Green River within the Monument; however, the confluence is downstream from any river or river segments located within the LSFO. Therefore, there is no connectivity issue with this determination. The segments of the Yampa River determined "eligible" by the LSFO are upstream from Dinosaur National Monument.

4.0 SUMMARY OF FINDINGS AND NEXT STEPS

The LSFO has inventoried all rivers and river segments in the field office for potential eligibility for WSR designation. In February and March of 2005, there was an overall review of potentially eligible rivers and river segments conducted as part of the current RMP revision. The potentially eligible river segments within the LSFO resource area were inventoried and determined to be free-flowing with no major impoundments. Each river segment was evaluated based on its having at least one ORV of regional and/or national significance (rare, unique, and/or exemplary) within a quarter-mile reach of the river's high water mark.

Based on this review of potentially eligible rivers/river segments, the BLM LSFO ID Team has established WSR eligibility determinations for Beaver Creek (one segment), Vermillion Creek (one segment), and the Yampa River (three segments). These river segments have been tentatively classified as "wild," "scenic," or "recreational."

The final eligibility determination of WSRs for the BLM LSFO will become the basis for the next phase of this process—suitability determination. The suitability phase of eligible river(s)/segments for the NWSRS will occur during the RMP/EIS process. As part of the ongoing revision of the *Little Snake RMP*, the LSFO will consider if the potentially eligible segments of the identified rivers are "suitable" for recommendation to Congress for inclusion in the NWSRS. In this review, the RMP will provide a reasonable range of alternatives for designation. Final determination and recommendation of rivers suitable for inclusion in the NWSRS will be identified as a management action in the Final RMP and Record of Decision (ROD). "Suitable" rivers will then be managed to protect identified ORVs until Congress either approves or rejects the recommendations for inclusion in the NWSRS. Only Congress can designate a WSR. Decisions in the RMP simply identify segments that are suitable for inclusion in the NWSRS and provides for management on BLM-administered lands to preserve the values that made these rivers/river segments eligible.

5.0 REFERENCES

American Rivers, Inc. American Rivers Outstanding List, May, 1991

- Bureau of Land Management (BLM). Green River Resource Area Resource Management Plan and Final Environmental Impact Statement, Green River Resource Area, Rock Springs District. Washington, DC: U.S. Government Printing Office, 1996
- BLM. Information Memorandum 2004-196 Clarification of Policy in BLM Manual Section 8351, Wild and Scenic Rivers, with respect to Eligibility Criteria and Protective Management, June 22, 2004
- BLM. Little Snake Resource Management Plan Record of Decision, 1989
- BLM. Little Yampa Canyon Recreation Area Management Plan, October, 1996
- BLM. <u>Riparian Area Management (Technical Reference 1737-9-1993)</u>: Process for Assessing Proper <u>Functioning Condition</u>, 1993
- BLM. <u>Wild and Scenic Rivers Policy and Program Direction for Identification, Evaluation, and</u> <u>Management – 8351</u>, 1992 and changes as of 1993 (Sections 1601.03, I; 1623.41A 2d)
- BLM. Wilderness Study Report Craig District Study Areas, October, 1991
- Conrath, Fred. Geologist. BLM-Little Snake Field Office, Craig, Colorado. Personal communication, April, 2005
- Ernst, Rob. Geologist. BLM-Little Snake Field Office, Craig, Colorado. Personal communication, April, 2005
- Federal Register, Interagency Wild and Scenic Rivers Coordination Council, 1982 (www.nps.gov/rivers/publications.html)
- Keesling, Hal. Archeologist. BLM-Little Snake Field Office, Craig, Colorado. Personal communication, April, 2005
- National Park Service. <u>Dinosaur National Monument General Management Plan with Land Protection</u> <u>Plan Update</u>, April, 1991
- National Park Service. National Rivers Inventory (NRI) List, 1995
- Petch, B. Wildlife Conservation Biologist. Colorado Division of Wildlife. Personal communication, April, 2005
- Roehm, G.W. <u>Management Plan for Endangered Fishes in the Yampa River Basin Environmental</u> <u>Assessment. Upper Colorado River Endangered Fish Recovery Program Project No. C-9</u>, 2004
- U.S. Department of the Interior (USDI)/U.S. Department of Agriculture (USDA). <u>USDI-USDA</u> <u>Guidelines for Eligibility, Classification, and Management of River Areas</u>, September 7, 1982
- U.S. Forest Service. Routt National Forest Land and Resource Management Plan, February, 1998

- U.S. Forest Service. White River National Forest Land and Resource Management Plan, 2002
- Wild and Scenic Rivers Act of 1968. (16 U.S.C. 1271-1287), Public Law 90-542 as amended, passed October 2, 1968
- WO ECOMAP Team. USDA Forest Service. National Hierarchical Framework of Terrestrial Ecological Units, Washington, DC, 1993

6.0 ACRONYM LIST

ACEC	Area(s) of Critical Environmental Concern
BLM	Bureau of Land Management
CDOW	Colorado Department of Wildlife
EIS	Environmental Impact Statement
FSH	Forest Service Handbook
FSM	Forest Service Manual
GIS	Geographic Information Systems
ID (Team)	Interdisciplinary Team
IM	Information Memorandum
LSFO	Little Snake Field Office
NEPA	National Environmental Policy Act
NRI	National Rivers Inventory
NWSRS	National Wild and Scenic River System
ORV	Outstandingly Remarkable Value
RAMP	Recreation Area Management Plan
RMP	Resource Management Plan
ROD	Record of Decision
ROW	Right-of-Way
SLB	State Land Board
SRMA	Special Recreation Management Area
TR	Technical Reference
USDA	U.S. Department of Agriculture
USDI	U.S. Department of the Interior
USGS	U.S. Geological Survey
WSA	Wilderness Study Area
WSR	Wild and Scenic River
WSRA	Wild and Scenic River Act

- 0

ATTACHMENT 1. ELIGIBLE RIVER SEGMENTS AND CLASSIFICATION WITHIN THE LITTLE SNAKE FIELD OFFICE

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and	Classification Justification
	-	atershed # 14010	Watershed # 1401000122 Rock Creek	Classification	
None	N/A	N/A	A/N	N/A	N/A
	Ň	atershed # 14040	Watershed # 1404010612 Green River		
Chokecherry Creek	0	Yes	None	N/A	Y/N
Cottonwood Creek	ш	No	None	N/A	A/A
Hoy Dray	ш	No	None	N/A	V/N
Davis Draw	ш	No	None	N/A	V/N
Dry Creek	ш	No	None	N/A	V/N
Pot Creek	٩	No	None	N/A	V/N
Warren Draw	ш	No	None	N/A	V/N
Yellow Jacket Draw	ш	No	None	N/A	Y/N
	Wa	tershed # 140401	Watershed # 1404010611 Beaver Creek	jk	
Beaver Creek Segment 1: From Colorado State land boundary in T. 11N., R. 103W., Section 10 to the Colorado/Utah Border	P: Total length 5.0 miles (4.2 miles BLM, 0.8 miles SLB)	Yes	Fish population (Colorado River cutthroat trout)	Wild	Pristine area with no access roads or other developments
Spitzie Draw	0	Yes	None	N/A	V/N
Two Bar Creek	٩	No	None	N/A	V/N
Willow Creek	٩.	٥N	None	N/A	Y/N
	Wat	ershed # 140401	Watershed # 1404010901 Canyon Creek	ek	
Birdie Gulch	0	Yes	None	N/A	Y/N
Canyon Creek	٩	Yes	None	N/A	Y/N
Diamond Field Draw/Fisher Creek	0	Yes	None	N/A	Y/N

<u> </u>	ļ
E	
LITTLE SNAKE RMP DRAFT ENVIRONMENTAL IMPACT STATEMENT	
Σ	
Щ	
Γ	
È	
S	
E	
2	
P	
Σ	
Ę	
Y.	
È	
Ż	
Ξ	
2	
Z	
ž	
E	
F	
Ξ	
F	
Ц	
N	
ō	
Ы	
⋝	
R	
Щ	
Y	
Ā	I
5	
ш	I
Ц	
E	I
Ę	ĺ
Ч	

5
ã
×
ÅR
Ę
Æ
Ę,

	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Fisher Creek	0	Yes	None	N/A	N/A
Fonce Wash	0	Yes	None	N/A	N/A
G Wash	0	Yes	None	N/A	N/A
Hanging Tree Draw	ш	No	None	N/A	N/A
Johnson Draw	0	Yes	None	N/A	N/A
Upper Vermillion Creek	٩.	Yes	None	N/A	N/A
Whiskey Draw	ш	No	None	N/A	N/A
	N	atershed # 1404(Watershed # 1404010903 Vermillion		
Big Draw	0	Yes	None	N/A	N/A
Buck Draw	0	Yes	None	N/A	N/A
Bull Canyon	ш	No	None	N/A	N/A
Chokecherry Draw	0	Yes	None	N/A	N/A
Dry Creek	ш	No	None	N/A	N/A
Fondillos Draw	ш	No	None	N/A	N/A
Green Canyon	ш	No	None	N/A	N/A
Hells Canyon	ш	No	None	N/A	N/A
Hoy Draw	ш	No	None	N/A	N/A
Irish Canyon	ш	No	None	N/A	A/A
Lower Vermillion Creek Segment 1: From BLM boundary in T. 9N., R. 101W., Section 2 to Bluehill Road/Sparks Fault in T. 10N., R. 100W., Section 30	P: Total length 3.9 miles (2.9 miles BLM, 1.0 miles SLB)	Yes	Cultural (petroglyphs), geology (canyon formation)	Scenic	Pristine area; however, access roads exist on both ends of the river segment.
Matt Creek	ш	No	None	N/A	N/A
NS Creek	0	Yes	None	N/A	N/A
Shell Creek	Р	Yes	None	N/A	N/A
Talemantes Creek	0	Yes	None	N/A	N/A

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
	Wat	Watershed # 1404010902 Douglas Draw	0902 Douglas Dr		
Big Bend	ш	No	None	N/A	N/A
Kraft Draw	ш	No	None	N/A	N/A
Douglas Draw	ш	No	None	N/A	N/A
Hartman Draw	ш	No	None	N/A	N/A
Langley Draw	ш	No	None	N/A	N/A
Left Hand Draw	ш	No	None	N/A	N/A
Marshall	ш	Q	None	N/A	N/A
Martin Draw	ш	Q	None	N/A	N/A
Sager Draw	ш	No	None	N/A	N/A
Ted's Draw	ш	No	None	N/A	N/A
Weller Draw	ш	No	None	N/A	N/A
West Boone	ш	No	None	N/A	N/A
	Wai	Watershed # 1405000308 Powder Wash	0308 Powder Wa	sh	
Ace in the Hole	ш	oN	None	N/A	N/A
Beaver Slide Draw	ш	No	None	N/A	N/A
Big Hole Gulch	ш	No	None	N/A	N/A
Dry Gulch	ш	No	None	N/A	N/A
Eagle Rock Draw	0	Yes	None	N/A	N/A
Horse Draw	ш	٥N	None	N/A	N/A
Little Snake	Ч	Yes	None	N/A	N/A
North Fork	ш	oN	None	N/A	N/A
Powder Wash	0	Yes	None	N/A	N/A
Reservoir Draw	ш	No	None	N/A	N/A
Ruedloff Draw	0	Yes	None	N/A	N/A
Scandinavian Gulch	ш	No	None	N/A	N/A
Thornberg Gulch	0	Yes	None	N/A	N/A
Tommy's Gulch	ш	No	None	N/A	N/A

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

STATEMENT	
JITTLE SNAKE RMP DRAFT ENVIRONMENTAL IMPACT STATEMENT	
ENVIRONMEN	
E RMP DRAFT	
LITTLE SNAK	

2007
JANUARY

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Woodbury Gulch	ш	No	None	N/A	NA
	W	Watershed # 1405000309 Little Snake	00309 Little Snak	e	
Deep Canyon	Ш	No	None	A/N	N/A
Greasewood Gulch	ш	No	None	N/A	N/A
Little Snake River	٩	Yes	None	N/A	N/A
Red Wash	ш	No	None	N/A	N/A
Sevenmile Draw	ш	No	None	N/A	N/A
Simsberry Draw	ш	No	None	N/A	N/A
South Nipple Gulch	ш	No	None	N/A	N/A
Spence Gulch	ш	No	None	N/A	N/A
Schaffer Draw	ш	No	None	N/A	N/A
Three C Wash	ш	No	None	N/A	N/A
	Ň	Watershed # 1405000310 Sand Wash	00310 Sand Was	Ч	
Deep Canyon	ш	No	None	A/N	N/A
Dugout Draw	ш	No	None	N/A	N/A
East Boone Draw	ш	No	None	N/A	N/A
Horse Gulch	ш	No	None	N/A	N/A
Lake Draw	ш	No	None	N/A	N/A
Little Snake River	٩.	Yes	None	N/A	N/A
North Fork	ш	No	None	N/A	N/A
Pigpen Draw	ш	No	None	N/A	N/A
Sand Wash	ш	No	None	N/A	N/A
Sheepherder Springs Draw	ш	No	None	A/N	N/A
South Sand Wash	ш	No	None	N/A	N/A
Thompson Draw	ш	No	None	N/A	N/A
Two Bar Draw	ш	No	None	A/N	N/A
Vaughn Draw	Е	No	None	N/A	N/A
Wild Cow Draw	ш	No	None	A/N	N/A

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Yellow Cat Wash	Е	No	None	N/A	N/A
	Wa	Watershed # 1405000203 Spring Creek	0203 Spring Cree	k	
Alkali Draw	Ш	No	None	A/A	N/A
Bald Mtn. Draw	ш	No	None	N/A	N/A
Bob Hughes Creek	0	Yes	None	N/A	N/A
Cedar Springs Draw	ш	No	None	N/A	N/A
Deception Creek	ш	No	None	N/A	N/A
Freeman Gulch	ш	No	None	N/A	N/A
Graham Gulch	ш	No	None	N/A	N/A
Jacobs Draw	0	Yes	None	N/A	N/A
Lone Tree Gulch	ш	No	None	N/A	N/A
Mud Springs Gulch	Ш	No	None	V/N	N/A
Overholt Draw	ш	No	None	N/A	N/A
Pinetree Gulch	ш	No	None	N/A	N/A
Sand Creek	ш	No	None	N/A	N/A
Spring Creek	0	Yes	None	N/A	N/A
Thornberg Draw	ш	No	None	N/A	N/A
Twelve Mile	Ш	No	None	V/N	N/A
West Fork Sand Creek	0	Yes	None	V/N	N/A
West Prong Creek	Ш	No	None	V/N	N/A
Wildcat Draw	Е	No	None	V/N	N/A
Willow Creek	Ш	No	None	V/N	N/A

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

Classification Justification	Conditions in the river corridor are very limited in constructed development, making the segment eligible for "wild" classification. There are no access roads or development, stream banks are pristine, and the river runs through a Wilderness Study Area (WSA) and a designated ACEC. The area is also closed to motor vehicles.		N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tentative Eligibility and Classification	Wild		N/A	N/A	N/A	N/A	N/A	sh	N/A	N/A	N/A	N/A	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ORV	Fish population (Colorado River pikeminnow); recreation (boating); geologic (rare sediments, lithology, and stratification); and scenic (canyon views)	Watershed # 1405000202 Lay Creek	None	None	None	None	None)505 Crooked Wash	None	None	None	None	Watershed # 1405000204 Lower Yampa	None	None	None	None	None	None	None	None
Free-Flowing	Yes	atershed # 14050	No	No	Yes	No	No	Watershed # 1405000505	Yes	No	No	No	ershed # 140500	No	No	No	No	No	No	No	No
River Type*	P: Total length 3.3 miles (3.3 miles BLM)	3	ш	ш	0	ш	ш	Wate	0	ш	ш	ш	Wat	ш	ш	Ш	ш	ш	ш	ш	ш
River Segment	Yampa River Segment 3: From BLM boundary on east side of Cross Mountain Canyon in the southwest corner of T. 6N., R. 97W., Section 7 downstream to BLM boundary on west side of Cross Mountain Canyon of T. 6N., R. 97W., Section 23		Big Gulch	Bord Gulch	Lay Creek	North Fork Big Gulch	Wet Gulch		Crooked Wash	North Fork Sagebrush Creek	Sagebrush Creek	Sagebrush Draw		Bay Gulch	Big Joe Draw	Bower Draw	Browns Draw	Buck Draw	Buffalo Gulch	Burnt Gulch	Calico Draw

LITTLE SNAKE RMP DRAFT ENVIRONMENTAL IMPACT STATEMENT

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Corral Springs Draw	Э	oN	None	N/A	N/A
Disappointment Draw	ш	No	None	N/A	N/A
Five Springs	Э	οN	None	N/A	N/A
Happy Hollow	Ш	No	None	N/A	N/A
Holland Draw	Э	oN	None	N/A	N/A
Iron Mine Draw	ш	No	None	N/A	N/A
Little Joe Draw	ш	No	None	N/A	N/A
Peterson Draw	ш	No	None	N/A	N/A
Sawmill Canyon	ш	No	None	N/A	N/A
Starvation Valley	ш	No	None	N/A	N/A
Teepee Draw	ш	No	None	N/A	N/A
Vale of Tears	ш	No	None	N/A	N/A
Warm Springs Draw	ш	No	None	N/A	N/A
Yampa River	ш	No	None	N/A	N/A
		Watershed # 1405000201 Axial	5000201 Axial		
Bell Rock Gulch	ш	No	None	N/A	N/A
Ben Morgan Canyon	ш	No	None	N/A	N/A
Boxelder Gulch	0	Yes	None	N/A	N/A
Brush Draw	0	Yes	None	N/A	N/A
Collom Gulch	Э	οN	None	N/A	N/A
Deer Canyon	Э	oN	None	A/N	N/A
Dickman Draw	Э	oN	None	N/A	N/A
East Fork Collom Gulch	Э	οN	None	N/A	N/A
East Fork Morgan	Э	No	None	N/A	N/A
East Fork Wilson Creek	ш	No	None	N/A	N/A
Easton Gulch	Э	oN	None	A/N	N/A
Elkhorn Creek	Э	No	None	N/A	N/A
Fuhr Gulch	ш	No	None	N/A	N/A

RESOURCE MANAGEMENT PLAN D-24

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

LITTLE SNAKE RMP DRAFT ENVIRONMENTAL IMPACT STATEMENT

RY 2007	
JANUA	

Good Spring Creek P Hale Gulch E Hale Gulch E Horse Gulch E Jubb Creek O Jubb Creek E Jubb Creek E Jubb Creek E Jubb Creek E Jubb Creek C Jubb Creek E Maudlin Gulch E Maudlin Gulch O Maudlin Gulch C Maudlin Gulch C Mark Creek P Morgan Gulch O Post Oak Draw E Ralston Draw E Sand Spring Gulch C Staight Gulch 1 E Staight Gulch 2 C Staight Gulch 2 E Staight Gulch 2 E Staight Gulch 2 E	Solution of the second	None None None None None None None None	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A N/A
ch ch <td< td=""><td>N N N N N N N N N N N N N N N N N N N</td><td>None None None None None None</td><td>N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</td><td>N/A N/A N/A N/A N/A N/A N/A</td></td<>	N N N N N N N N N N N N N N N N N N N	None None None None None None	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A
	No Vo Vo Vo Vo	None None None None None	N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A
	Vo No No No No No No No No No No No No No	None None None None None None None None	N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
	No N	None None None None	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A
ш ш о с о ш ш о ш о ц , , , , , , , , , , , , , , , , , , ,	No Vo Vo	None None None	N/A N/A N/A N/A N/A	N/A N/A N/A N/A
ш о с о ш ш о ш ц п о с о п п п о п п п п г г	No No Vo	None None None	N/A N/A N/A	N/A N/A N/A
с с	Yes Vo	None None	N/A N/A	N/A N/A
	ON Sov	None	N/A	N/A
ь ш ш о ш щ ц о ч ш ш о ч щ щ о ч щ щ щ п о ч щ щ щ щ щ щ щ щ щ щ щ щ щ щ щ щ щ щ щ	Vac	None		
ща со ща ща со	60-		A/A	N/A
ъ ш щ щ о щ щ цанка и ц цанка и цанка и ц цанка и цанка и	No	None	N/A	N/A
ь ш щ о ъ	No	None	N/A	N/A
Gulch B E E E	Yes	None	N/A	N/A
ш ш с.	No	None	N/A	N/A
ш а.	No	None	N/A	N/A
٩.	No	None	N/A	N/A
	No	None	N/A	N/A
Taylor Creek E	No	None	N/A	N/A
Temple Gulch/ Canyon O 9	Yes	None	N/A	N/A
West Fork Good Springs Creek E	No	None	N/A	N/A
West Fork Jubb Creek E	No	None	N/A	N/A
Wilson Creek P Y	Yes	None	N/A	N/A
Wood Gulch E	No	None	N/A	N/A

RESOURCE MANAGEMENT PLAN D-25

> LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Yampa River Segment 1: From BLM boundary at T. 5N., R. 92W., Section 9 (Williams Fork area) downstream to BLM boundary near the center of T. 5N., R. 92W., Section 7 (Milk Creek area)	P: Total length 2.8 miles (1.9 miles BLM, 0.9 miles private)	Yes	Fish population (Colorado River pikeminnow) and recreation (boating)	Recreational	Several land uses in the area limit classification to "recreational" and prohibiting the area's eligibility as either "scenic" or "wild." These uses include: Two active coal mines Railroad parallels the river Noticeable rip-rap (railroad ballast) Visible structures (railroad ballast) Visible structures (railroad trestle) Irrigation pumps Agricultural use Buildings visible Several vehicle access roads Powerline crossing the river Existing rights-of-way (ROWs) for transportation (valid existing rights)
Yampa River Segment 2: From BLM boundary near the center of T. 5N., R. 92W., Section 7 (Milk Creek area), downstream to BLM boundary in the northwest corner of T. 6N., R. 93W., Section 32 (Duffy Tunnel area)	P: Total length 15.9 miles (13.9 miles BLM, 2.0 miles private)	Yes	Fish population (Colorado River pikeminnow) and recreation (boating)	Scenic	There are several existing roads in the area but these do not affect scenic values; however, existing road access on both sides of the river prevents consideration for "wild" classification.
	Wate	ershed # 1405000	Watershed # 1405000307 Fourmile Creek	ēk	
East Pole Gulch	Е	No	None	N/A	N/A
East Timberlake Creek	0	Yes	None	N/A	N/A
Fourmile Creek	٩	Yes	None	N/A	N/A
Gledhill Draw	0	Yes	None	N/A	N/A

A/A A/A

A/A A/A

None None

٥ ٥

ш ш

Mud Spring Draw

Housel Gulch

E SNAKE RMP DRAFT ENVIRONMENTAL IMPACT STATEMENT	
WE	
ΞE	
TA	
E	
AC	
Æ	
ΓI	
ΤA	
Ä	
Ξ	
6	
Æ	
Z	
ΤE	
AF	
DR	
Æ	
R	
KE	
NA	
S	
ILI	
Ш	
Г	

007
2
\geq
ÅR
Б
E
\triangleleft

	River Type*	Free-Flowing	ORV	l entative Eligibility and Classification	Classification Justification
	Water	Watershed # 1405000107 Fortification Creek)7 Fortification (Creek	
Cedar Hill Gulch	ш	No	None	N/A	A/N
Cole Gulch	0	Yes	None	N/A	N/A
Cottonwood Gulch	0	Yes	None	N/A	N/A
Blue Gravel Creek	ш	No	None	N/A	N/A
Coon Gulch	ш	N	None	N/A	N/A
Dry Fork	٩.	Yes	None	N/A	N/A
Fortification Creek	۵.	Yes	None	N/A	N/A
Hayden Cutoff Draw	ш	N	None	N/A	N/A
Pole Gulch	0	Yes	None	N/A	N/A
West Timberlake Creek	ш	N	None	N/A	N/A
Wymore Gulch	0	Yes	None	N/A	N/A
	Wa	Watershed # 1405000111 Williams Fork	0111 Williams Fo	ork	
Badger Creek	д.	No	None	N/A	V/N
Berry Gulch	٩.	Yes	None	N/A	N/A
Castor Gulch	0	Yes	None	N/A	N/A
Daton Gulch	0	Yes	None	N/A	N/A
Deakin Gulch	0	Yes	None	N/A	N/A
Deal Gulch	0	Yes	None	N/A	V/N
Deer Creek	٩.	Yes	None	N/A	N/A
Horse Gulch	0	Yes	None	N/A	N/A
Jeffway Gulch	٩.	Yes	None	N/A	N/A
Long Gulch	ш	No	None	N/A	V/N
Peck Gulch	ш	No	None	N/A	V/N
Rock Gulch	0	Yes	None	N/A	N/A
Searcy Gulch	0	Yes	None	N/A	N/A
Spring Gulch	٩	Yes	None	N/A	N/A
Sulphur Gulch	0	Yes	None	N/A	N/A

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Ute Gulch	Э	No	None	N/A	N/A
West Gulch	0	Yes	None	N/A	N/A
Williams Fork	٩	Yes	None	N/A	N/A
	Waters	Watershed # 1405000305 Willow/Slater Creek	5 Willow/Slater	Creek	
First Creek	0	Yes	None	N/A	N/A
Grizzly Creek	٩	No	None	N/A	N/A
Jack Rabbit Creek	ш	No	None	N/A	N/A
Little Field Draw	ш	Q	None	N/A	N/A
Mule Creek	ш	No	None	N/A	N/A
Second Creek	ш	No	None	N/A	N/A
Willow Creek	٩	Yes	None	N/A	N/A
3	atershed # 14	Watershed # 1405000302 Little Snake River above Slater Creek	inake River abov	ve Slater Creek	
Cantling Creek	0	Yes	None	N/A	N/A
Deadman Draw	ш	No	None	N/A	N/A
Deer Creek	Э	oN	None	N/A	N/A
Fly Creek	0	Yes	None	N/A	N/A
Little Snake	٩	No	None	N/A	N/A
Tree Culture	ш	No	None	N/A	N/A
	Watershed :	ershed # 1405000301 Little Snake River Headwaters	le Snake River H	Headwaters	
Beeler Gulch	Э	No	None	N/A	N/A
Brown Creek	Э	oN	None	N/A	N/A
Gold Blossom	Ч	No	None	N/A	N/A
Johnson Creek	Ч	٥N	None	N/A	N/A
Middle Fork Little Snake	Ч	Yes	None	N/A	N/A
South Fork of Little Snake	Ч	Yes	None	N/A	N/A
Tunnel Creek	Ч	No	None	N/A	N/A
Willow Creek	Ф.	No	None	N/A	N/A

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

IMPACT STATEMENT
1
E SNAKE RMP DRAFT ENVIRONMENTA
0
RMP
IAKE
SS
LITTL

2007
ARY
ANU
_

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
	Watershed #	shed # 1405000101	I Elk River Headwaters	waters	
Beaver Creek	٩	No	None	N/A	V/N
Deep Creek	۵.	No	None	N/A	N/A
Dutch Creek	٩.	No	None	N/A	N/A
Red Creek	٩	Yes	None	N/A	N/A
Willow Creek	۵.	Yes	None	N/A	N/A
	Water	Watershed # 140500010	1405000104 Steamboat Springs	orings	
Butcher Knife Creek	٩.	No	None	N/A	N/A
Cow Creek	ш	No	None	N/A	N/A
Oak Creek	۵.	N	None	N/A	N/A
	Wat	Watershed #1405000102 Lower Elk River	102 Lower Elk R	iver	
Day Creek	۵.	Yes	None	N/A	N/A
Dutch Gulch	۵.	No	None	N/A	N/A
Salt Creek	ш	No	None	N/A	N/A
Taylor Canyon	٩	Yes	None	N/A	V/N
Trull Creek	ш	No	None	N/A	N/A
	Wa	Watershed # 1405000106 Elkhead Creek	0106 Elkhead Cr	eek	
Bull Gulch	ш	No	None	N/A	N/A
Cottonwood Creek	0	Yes	None	N/A	N/A
Dry Fork	ш	No	None	N/A	V/N
Elkhead Creek	۵.	Yes	None	N/A	N/A
Jimmy Dunn Gulch	Ш	No	None	N/A	V/N
North Fork Elkhead	Ш	No	None	N/A	N/A
	Watershe	Watershed # 1405000108 Yampa River Craig/Hayden	ampa River Crai	g/Hayden	
Boone Gulch	ш	No	None	N/A	Y/N
Cedar Mtn. Gulch	Ш	No	None	N/A	V/N
Fish Creek	0	Yes	None	N/A	N/A

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Temple Gulch	ш	No	None	N/A	N/A
	Watershed #	Watershed # 1405000105 Yampa River/Fish & Trout Creek	pa River/Fish &	Trout Creek	
Bear Gulch	ш	No	None	N/A	N/A
Butcher Knife Creek	0	Yes	None	N/A	N/A
Coyote Creek	٩	No	None	N/A	N/A
Fish Creek	٩	No	None	N/A	N/A
Foidel Creek	٩	No	None	N/A	N/A
Little Middle Creek	٩	Yes	None	N/A	N/A
Little Trout Creek	٩	Yes	None	N/A	N/A
Middle Creek	٩	Yes	None	N/A	N/A
Mule Gulch	ш	No	None	N/A	N/A
North Fork Middle Creek	٩	Yes	None	N/A	N/A
Sage Creek	٩.	Yes	None	N/A	N/A
Scotchmans Gulch	ш	No	None	N/A	N/A
Tow Creek	٩	No	None	N/A	N/A
Trout Creek	٩	Yes	None	N/A	N/A
Yoast Gulch	Р	No	None	N/A	N/A
	Wate	Watershed # 1405000109 Morrison Creek	109 Morrison Cr	eek	
Morrison Creek	Ч	Yes	None	N/A	N/A
	Watershe	Natershed # 1405000103 Yampa River Headwaters	∕ampa River Hea	ldwaters	
Hunt Creek	Ч	No	None	N/A	N/A
Middle Hunt Creek	ш	No	None	N/A	N/A
Watson Creek	Ч	No	None	N/A	N/A
	Water	Watershed # 1405000112	12 East Williams	Fork	
Card Gulch	ш	No	None	N/A	N/A
Dowden Gulch	Ч	No	None	N/A	N/A
Dunstan Gulch	0	Yes	None	N/A	N/A
East Fork Williams Fork	٩.	No	None	N/A	N/A

RESOURCE MANAGEMENT PLAN D-30

LITTLE SNAKE FIELD OFFICE BUREAU OF LAND MANAGEMENT

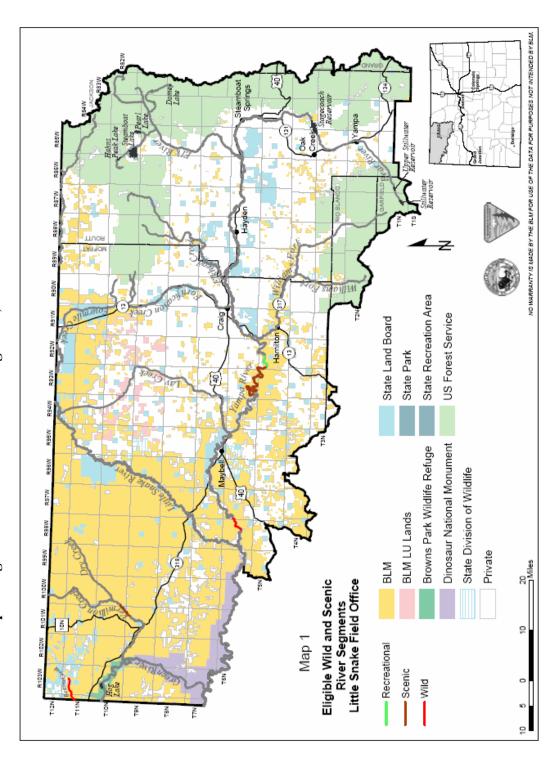
LITTLE SNAKE RMP DRAFT ENVIRONMENTAL IMPACT STATEMENT

JANUARY 2007

River Segment	River Type*	Free-Flowing	ORV	Tentative Eligibility and Classification	Classification Justification
Hayden Gulch	٩	Yes	None	N/A	N/A
Willow Creek	Ч	No	None	N/A	N/A
Wise Gulch	0	Yes	None	N/A	N/A
	Waters	Watershed # 1405000110 South Williams Fork	0 South William	s Fork	
Beaver Creek	٩	No	None	N/A	N/A
Butler Creek	٩	Yes	None	N/A	N/A
Cedar Creek	٩	No	None	N/A	N/A
Coal Creek	0	Yes	None	N/A	N/A
Indian Run	٩	No	None	N/A	N/A
Pagoda	٩	Yes	None	N/A	N/A
South Fork Williams Fork	٩	No	None	N/A	N/A
		Watershed # 1406000102	1406000102		
None	N/A	N/A	N/A	N/A	N/A
		Watershed # 1406000103	1406000103		
None	N/A	N/A	N/A	N/A	N/A
* Perennial (P), Other Regular or Predictable Flows (O), Ephemeral or Other Non-Predictable Flows (E)	s (O), Ephemeral	or Other Non-Predictab	le Flows (E)		

(E) (O), Ephe ž Ĵ

ATTACHMENT B. MAPS



Map 1. Eligible Wild and Scenic River Segments, Little Snake Field Office

ξ