U.S. Department of the Interior
Bureau of Land Management

Prineville District Office
3050 NE 3rd Street
Prineville, Oregon 97754

June 2000

John Day River Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement

Volume 2
Appendices

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BLM/OR/WA/PT-00/048+1792

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Appendices

Note: Appendices G, H, and I (Glossary, Acronyms, and References) are not included in the appendices in this document. These sections were moved to Volume 1 to improve document organization.

Appendix A Plan Participants

Planning Team

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Core Team

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Resource Advisory Council
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John Tanaka	
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Appendix B River Authorities

There are many federal, state and local agencies and organizations with management responsibilities which affect the John Day River System. The following section describes the responsibilities of federal, state, local and private agencies whose actions influence the John Day River system.

Tribal Governments

The Confederated Tribes of the Warm Springs Reservation and the Confederated Tribes of the Umatilla Reservation have special interests in management of the John Day River System. Members of both of these organizations use the river and surrounding lands in traditional ways for hunting, gathering and religious purposes. Previous treaties between the United States Government and these tribes give special rights to their members regarding use and access of lands in the John Day Basin.

Federal Agencies

Bureau of Land Management
The BLM, U.S. Department of Interior, has lead responsibility for development of this plan. The BLM is responsible for managing multiple uses on extensive amounts of federal land in the John Day River System.

National Park Service
The NPS, U.S. Department of Interior, also plays an important role in management of the John Day River System. The NPS administers the John Day fossil Beds National Monument. The three of the National Monument are located in the John Day Basin between Dayville and Clarno. The NPS manages several miles of river frontage. More importantly the NPS plays a role by attracting visitors and informing them about the fossil resources in the John Day River System.

Natural Resource Conservation Service
The NRCS, U.S. Department of Agriculture, promotes and coordinates soil conservation, agricultural, and natural resource projects on private land in the John Day River basin. Soil conservation in the basin plays a critical role in protecting water quality and quantity.

Bureau of Indian Affairs
The BIA, U.S. Department of Interior, manages the trust responsibility between the US government and Sovereign Indian Tribes, including the Confederated Tribes of the Warm Springs Reservation and the Confederated Tribes of the Umatilla Reservation. The BIA is mandated to encourage and support Tribal efforts to govern themselves; and to provide needed programs and services on the reservations.

U. S. Fish and Wildlife Service
The USFWS, U.S. Department of Interior, administers the federal Endangered Species Act of 1973 (as amended). The BLM consults with USFWS to obtain a biological opinion on appropriate courses of action when a determination has been made that a threatened or endangered species, or critical habitat may be affected by a proposed management action. An opinion may require a proposed action to be modified or abandoned.

Bonneville Power Administration
The BPA markets electric power and energy from federal hydroelectric projects in the Pacific Northwest. In addition, BPA is responsible for energy conservation, renewable resource development and fish and wildlife enhancement under the provisions of the Pacific Northwest Electric Power Planning and Conservation Act of 1980.

Environmental Protection Agency
The EPA is responsible for protecting and enhancing our environment under the laws enacted by Congress. EPA's mandate is to mount an integrated, coordinated attack on environmental pollution in cooperation with state and local governments.

Bureau of Reclamation
The original purpose of the BOR was to secure a year-round water supply for irrigation in the 17 western states. That mission was expanded to include domestic and industrial water, generation of hydroelectric power, provision of outdoor recreation opportunities, regulation of rivers flood control and the enhancement and protection of fish and wildlife habitats.

Army Corps of Engineers
The Department of Defense, through the Army Corp of Engineers issues and administers permits for fill and removal within the federally designated river corridor.

U.S. Geological Survey
The USGS is responsible for identifying the nation's land, water, energy and mineral resources; classifying federal lands for mineral and energy resources and water power potential; investigating natural hazards; and conducting the national mapping program. The USGS has been gaging stream flows since 1894.

Federal Energy Regulatory Commission
The FERC, a five-member commission within the Department of Energy, sets rates for the transportation and sale of natural gas and oil and for the transmission and sale of electricity. The FERC regulates the licensing of hydroelectric power projects.

National Marine Fisheries Service
The NMFS is part of the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce. Under the Fishery Conservation and Management Act of 1976, NMFS conducts an integrated program of management, research, and services related to the protection and rational use of living marine resources and their habitats. The BLM will consult with NMFS on concerns for anadromous fish in the John Day River System.

Northwest Power Planning Council
The NPPC was authorized by the Northwest Power Act of 1980. Four states (Idaho, Montana, Oregon, and Washington) make up the NPPC. The council consists of two persons from each state whose job is to: 1) develop a reliable and economical 20 year electrical power plan 2) protect and re-build fish and wildlife populations, and 3) involve the public in the decision making process. The council works with a variety of local, state, and federal agencies, as well as with concerned environmental groups and individuals, to strike a balance between the needs for electrical power and the survival of fish and wildlife.

State Agencies

Oregon State Parks and Recreation Department
The OPRD administers the State Scenic Waterways Program which includes segments of the John Day River. The OPRD determines the best information available regarding instream water flow deeds for recreational use in scenic waterways.

Oregon Department of Fish and Wildlife
The Oregon Department of Fish and Wildlife (ODFW) manages fish and wildlife populations and develops fishing and hunting regulations. The BLM and the ODFW have worked closely on site-specific activities to protect and enhance resources of interest to both agencies. The ODFW also works with the BLM in vegetation monitoring and evaluation, the installation of range and wildlife improvements and the reintroduction of native wildlife species.

Oregon State Marine Board
The OMB regulates recreational boating in Oregon.

Oregon Department of Environmental Quality
The DEQ regulates and guards against the deterioration of air and water quality in the state of Oregon. DEQ implements the Statewide Water Quality Management Plan.

Oregon Department of Forestry
The ODF manages state owned forests and administers the Forest Practices Act for timber harvest on private lands within the corridor. The BLM has entered into an memorandum of understanding with the ODF to ensure minimum standards are met for timber harvest, reforestation of economically suitable lands, road construction, chemical application, slash disposal and maintenance of streamside buffers.

Division of State Lands
The DSL administers the state's Removal-Fill Law which protects Oregon's waterways from uncontrolled alteration. The law requires a permit for fill or removal of more than 50 cubic yards of material within state waterways. The permit review process involves coordination with the natural resource and land use agencies at the local, state and federal levels.

Oregon Department of Transportation
The ODOT is responsible for planning, designing, re-constructing, and maintenance of the state highways for public; placing signs; and the management of motor vehicle use.

A memorandum of understanding, approved by the State Highway Engineer and Regional Forester for the Pacific Northwest Region, USFS, provides the basis for coordinating issues related to state highways through national forest lands. ODOT lacks special requirements for highways within State Scenic Waterways. However. ODOT must prepare a section 4(f) evaluation under the Federal Aid Highway Act of 1968 for any federally funded highway project which requires the use of any publicly owned land used as a recreation area beyond the existing highway improvement.

Oregon State Police
OSP enforces all Oregon statutes, including Marine Board regulations, without limitation by county or other political subdivision.

Oregon Water Resources Department
The OWRD is responsible for the management and distribution of the state's water resources.

Department of Land Conservation and Development
The DLCD, along with the guidance and authority of the Oregon Land Conservation and Development Commission (LCDC) works with cities, counties, and state agencies to develop and maintain Oregon's comprehensive land use plans and regulations. As part of these responsibilities, DLCD ensures that cities, counties, and state agencies have included scenic waterways in their Goal 5 planning pertaining to natural resources. Goal 5 planning requires comprehensive plans that will 1) ensure open space, 2) protect scenic and historical areas and natural resources, and 3) promote healthy and visually attractive environments.

State Historic Preservation Office
The SHPO was created by the National Historic Preservation Act of 1966. Among SHPO's many roles is the evaluation of cultural property, in consultation with federal agencies of public nominations, to determine if the property qualifies for listing on the National Register of Historic Places.

Local Government

County and City Governments
The John Day River System is located in eleven Oregon counties. County and city governments adopt plans and ordinances which affect the John Day River System. Waste disposal, county zoning, and local law enforcement are examples of important areas where the John Day River is affected. Collectively, these governments have a profound influence of the river due to the large amounts of private land affected by these governments.

County Sheriff Departments
All county sheriff departments are empowered to enforce Oregon State Statutes and river management laws and rules adopted and implemented by the OMB and OPRD. Enforcement generally occurs within each department's respective counties, however they do have authority to cross county lines. County sheriff activities, including search and rescue operations, are coordinated with state and federal law enforcement agencies and assisted by the general public.

Private Land Owners

Private land owners comprise a large percentage of lands along the banks of the John Day River System. Cooperation with private land owners is essential to ensure protection and enhancement of river values. BLM will continue to consult and coordinate with affected private landowners on development, implementation and monitoring of this plan.

Federal, State, and Local Government Authorities Adjacent to the John Day River

Federal Agencies	State Agencies	Counties	Cities
BLM	ODFW	Crook	Canyon City
USFS	OPRD	Harney	Dayville
NPS	OMB	Gilliam	John Day
BIA	DEQ	Grant	Kimberly
USFWS	ODF	Jefferson	Monument
NMFS	ODSL	Morrow	Mt. Vernon
BPA	ODOT	Sherman	Prairie City
EPA	OSP	Umatilla	Spray
BOR	OWRD	Union	
CE	DLCD	Wasco	
USGS	ODF	Wheeler	
NPPC		SWCDs	
FERC			

Appendix C Related Plans and Programs

Several existing management plans and special areas affect the John Day River. The following describes the plans, special areas, and the agencies responsible for administration.

BLM

Land Use Plans
The BLM has completed two Resource Management Plans (RMP's) that include the John Day River System; the Two Rivers RMP (1986) and the John Day RMP (1985). The Two Rivers RMP covers BLM lands on the lower John Day River downstream from Kimberly. The John Day RMP covers BLM lands in the upper John Day River System upstream from Kimberly. These plans include land use goals and objectives for BLM administered lands. These two RMP's and associated supporting records provide the foundation for this plan. These plans, along with associated supporting records, are available for review at the Prineville BLM District Office.

Backcountry Byway
The BLM dedicated fifty miles of public road paralleling the South Fork of the John Day River as a National Backcountry Byway In 1989. The road extends from Dayville to the Malheur National Forest boundary. The BLM Byways program helps meet the national demand for pleasure driving opportunities, enhances recreation experiences and informs visitors about the values of public lands.

Wilderness Study Area Management
There are five BLM managed Wilderness Study Areas adjacent to the South Fork and Mainstem of the John Day River that will be considered for possible Wilderness designation by Congress. Suitability for wilderness is addressed in the BLM statewide Wilderness EIS and associated Wilderness Study Report. Wilderness Study Areas are roadless federal lands that have met the minimum criteria of naturalness, solitude and other primitive attributes which causes them to be studied for possible Wilderness designation by the U.S. Congress. During the "study", the BLM considered other possible land uses for the area, the consequences of Wilderness designation and, with public involvement, made a recommendation to Congress as to whether or not they should be designated Wilderness.

Cooperative Management Area
The BLM and ODFW jointly manage the Murderer's Creek Cooperative Management Area on the South Fork of the John Day River

U.S. Forest Service

Each of the four national forests containing portions of the John Day River System (Umatilla, Malheur, Ochoco, and Wallowa-Whitman) have comprehensive land use plans guiding management of these forests. These Forest Plans are similar to the BLM's Resource Management Plans in structure and intent.

Wild and Scenic River Plan
The Umatilla National Forest developed and administers Wild and Scenic River Management Plan for the North Fork of the John Day River.

Wilderness Areas
The Umatilla National Forest administers the North Fork of the John Day River Wilderness Area. The Ochoco National Forest administers the Black Canyon Wilderness Area.

National Park Service

The NPS has developed a comprehensive land use plan for the three units of the John Day Fossil Beds National Monument. This plan identifies how park visitor facilities and services will be provided and how visitors will be managed.

Oregon Department of Fish and Wildlife

ODFW manages the John Day Wildlife Refuge located between the Columbia River and Thirtymile Creek. ODFW, with the BLM, cooperatively manages the Murderer's Creek Cooperative Management Area.

Conservation Reserve Program

The Farm Service Agency (FSA) administers the U.S. Department of Agriculture (USDA) Conservation Reserve Program. This voluntary program pays farmers or ranchers who agree to take highly erodible soils out of cultivation for ten years. the program is limited to no more than 25 percent of the highly erodible soils in each county throughout the nation. Enrolled lands are planted with grasses and not used for grazing or other commercial purposes. It is believed that the "reserve" lands make a substantial contribution to reduced erosion, thereby improving downstream water quality.

It is uncertain whether the program will continue to be funded of whether current participants residing in the John Day River basin will extend their enrollments. Even if the involved lands are returned to active cultivation, the improved soil condition likely would provide residual beneficial effects to the ecosystem for another two of more years. The NRCS also cooperates with appropriate weed control districts to deal with infestations of noxious weeds.

Cooperative Programs

The BLM, USFS, ODFW, NRCS, SWCDs, Watershed Councils, and other agencies are working to improve aquatic habitat in the John Day River watershed. Cooperative work continues between the BLM, USFS, ODFW, the Columbia River Intertribal Fish Commission, NMFS, NPPC, NRCS, and private land owners, to implement riparian improvement projects (Table 4). The NRCS has participated in the development of coordinated resource management plans and the collection of resource data related to riparian habitat management. Through the Pacific Northwest Electric Power Planning and Conservation Act (P.L. 96-501), the BLM and the Bonneville Power Administration (BPA) coordinate resource management programs with a memorandum of understanding. The memorandum allows regional and district coordination where similar interests exist regarding water resources and major utility corridors. The BLM, BPA and NPPC work together to stabilize and improve riparian zones and anadromous fish habitat through grants provided by the BPA. The BPA also assists the BLM in identifying and evaluating regional utility corridor options.

County Comprehensive Plans

The comprehensive plans for the eleven counties containing the John Day River System have been recognized by the Oregon Land Conservation and Development commission as conforming with statewide planning goals and objectives. Virtually all private lands and all of the BLM and state managed lands within the planning area are in county designated "exclusive farm use", "forest" or other resource protection zones. Approved land uses compatible with county farm, forest and other resource zones include livestock grazing, growing crops and timber management, with an emphasis on protection and enhancement of natural values and cultural, visual and recreation resources. More specific land use planning information is provided for the river in **Chapters IV** and **V**.

Appendix D Related Planning Documents

Resource Assessments

Draft Resource Assessments evaluating the significance of river values in the John Day River segments designated as Wild and Scenic were completed by an interdisciplinary team in June 1990. They were distributed to interested and knowledgeable members of the public. A "final" version, incorporating public comment, was completed in July of 1990. It was revised and updated in 1993 following additional data collection and public comment.

1993 Draft John Day River Management Plan and Environmental Impact Statement

A draft John Day River Management Plan and EIS was released for public review and comment in 1993. Work on the final plan was suspended until more data on grazing evaluations was completed. The draft plan and EIS you are now reading is the second draft and includes grazing and other data unavailable in 1993.

Publication of Proposed Action in Federal Register

An initial proposed action was developed in response to the issues identified in the planning process. a description of that proposed action was published in the Federal Register January 8, 1992. The proposed action detailed in the Federal Register was refined during the analysis process and became Alternative 3 in this document (see Chapter 2).

Second Draft Environmental Impact Statement and Management Plan (DEIS)

The document you are currently reading is the DEIS. It provides comparison of different management alternatives for the John Day Wild and Scenic River and State Scenic Waterway as well as non-designated reaches of the river that are outside of surrounding national forests. This document will also identify a preferred alternative. After publication of the DEIS interested parties will have 60 days to comment. Public workshops will be held to provide opportunities for public comment. Times and places will be published in the Federal Register, The Oregonian (Portland), the Redmond Spokesman, and The Bulletin (Bend), or you may call 503 383-4769 for information.

Final Environmental Impact Statement and Management Plan (FEIS)

A Final Environmental Impact Statement (FEIS) will be completed after considering the public comments on this draft plan and EIS. The FEIS will reflect comments submitted in response to the DEIS. It will include a Record of Decision (ROD), the District Manager's decisions and recommendations for managing the John Day River. The alternative selected in the ROD will become the final John Day Wild and Scenic River Management Plan. This document will include an implementation and monitoring plan and will be an amendment to the Forest Plan.

Planning Records

The complete planning record for this Draft Environmental Impact Statement (DEIS) is available at the BLM Prineville District Office,, Prineville, Oregon 97754. Included in the planning record are such things as baseline data, maps, and studies used in preparing this document. All documents incorporated by reference are also part of the planning record. This planning record is available for public inspection and review.

Appendix E Special Status Wildlife Species

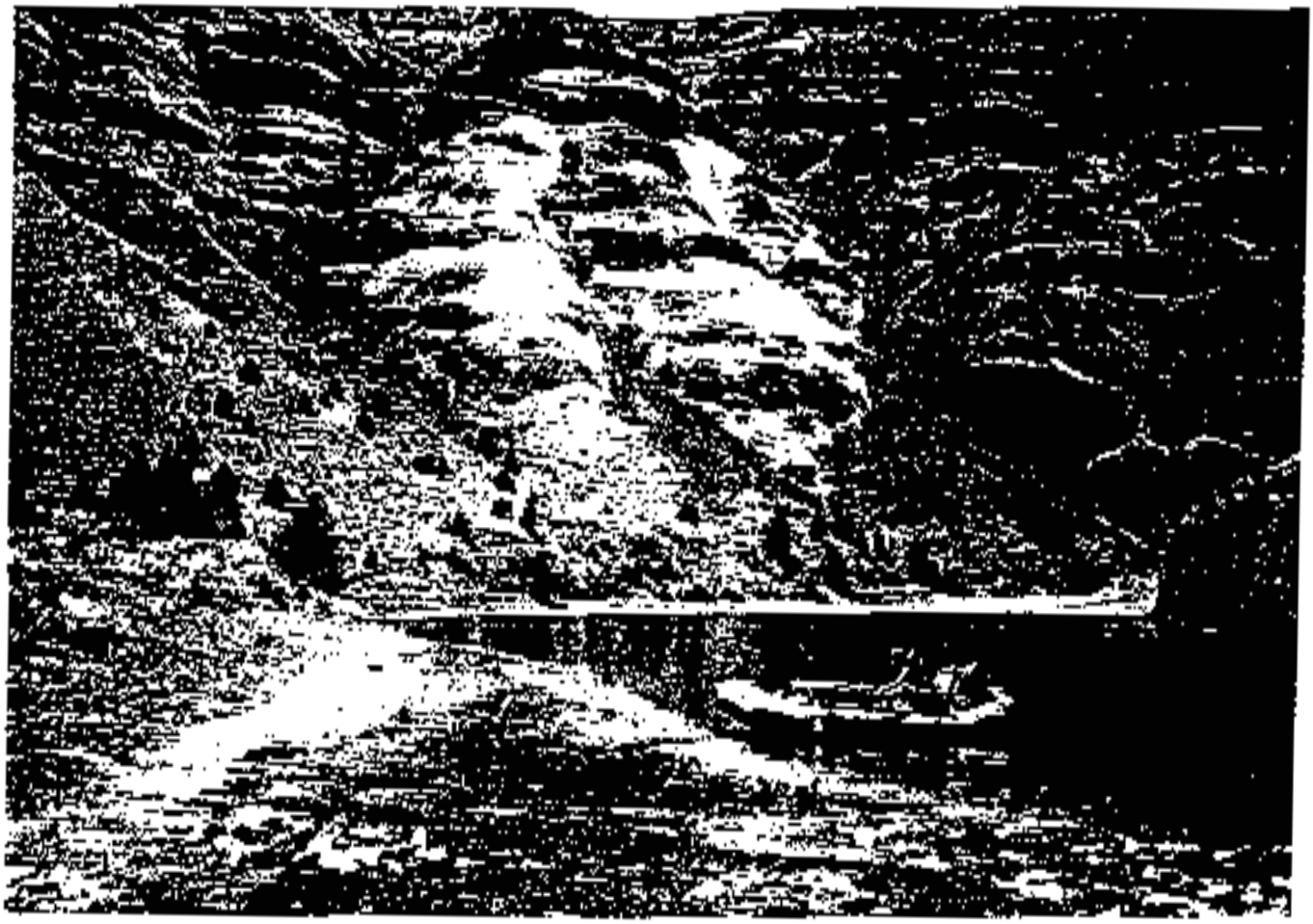
Endangered and Threatened Wildlife Species and Wildlife Species of Concern by Major Land Types for the John Day Wild and Scenic River Plan.

Species	Federally Listed T-Threatened E-Endangered C-Candidate PT-Proposed Threatened	USFS Species of Concern	Oregon Natural Heritage Program (1) Critical (2) Imperiled (3) Rare (4) Not rare	U.S. Forest Service Sensitive	BLM Sensitive	ODFW (SC) Critical (SV) Vunerable (SP) Peripheral (SU) Status Undetermined (LT) Listed Threatened	Major Land Type Forest	Range	Riparian
HERPTILES									
Northern Sagebrush Lizard		X	3		X				X
Northern Leopard Frog			2		X	SC			X
Columbia Spotted Frog	C		3		X	SU			X
Northwest Painted Turtle			2	X	X	SC			X
Western Toad			3			SV			X
Woodhouse's Toad			3			SP			X
Tailed Frog		X	3		X	SV			X
BIRDS									
Northern Goshawk		X	3	X	X	SC	X		
Great Gray Owl			4			SV	X		
Pileated Woodpecker			4	X	X	SC	X		
Lewis's Woodpecker			3		X	SC	X		
White-Headed Woodpecker			3		X	SC	X		
Three-toed Woodpecker			4		X	SC	X		
Black-backed Woodpecker			4		X	SC	X		
Flammulated Owl			4		X	SC	X		
Williamson's Sapsucker			3			SC	X		
Western Blue Bird			4			SC	X		
Western Burrowing Owl		X	3		X	SC		X	
Columbian Sharp-tailed Grouse			X	1		X			X
Western Sage Grouse		X	3	X	X	SC		X	
Ferruginous Hawk		X	3	X	X	SC		X	
Upland Sandpiper			2		X	SC		X	
Loggerhead Shrike			4			SV		X	
Olive-sided Flycatcher		X							X
Harlequin Duck		X	2	X	X	SU			X
Tricolored Blackbird		X	2	X	X	SP			X
Grasshopper Sparrow			3			SV		X	
Black Tern		X	3		X				X
Long-billed Curlew			4	X				X	
Swainsons Hawk		X	3			SV		X	
Peregrine Falcon	E	X	1	X	X	LE			X
Bank Swallow			4			SV			X
Bald Eagle	T	X	1	X	X	LT			X
MAMMALS									
American Marten			3	X		SV	X		
Pacific Fisher		X	2	X	X	SC	X		
California Wolverine		X	2	X	X	LT	X		
California Bighorn Sheep		X	4	X	X			X	
North American Lynx	PT	X	2	X	X		X		
Gray Wolf	E	X	2	X	X		X		
Washington Ground Squirrel			X	2	X	X	SC		X
Pygmy Rabbit		X	3	X	X	SV		X	
White-tailed Jack Rabbit			3			SV		X	
Long-legged Myotis		X	3			SU		X	
Spotted Bat		X			X				
Small-footed Myotis		X	3		X	SU		X	
Long-eared Myotis		X	3		X	SU	X		
Fringed Myotis		X	3			SV			X
Yuma Myotis		X	3			SU			X
Pale Western Big-eared bat		X	3			SC	X		
Pacific Western Big-eared bat		X	2	X	X	SC	X		

Appendix F

Lower John Day

Wild and Scenic River Resource Assessment



June 1991

Bureau of Land Mangement
Prineville District

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I. INTRODUCTION

In 1968, Congress enacted the National Wild and Scenic Rivers Act and, for the first time, established a system for preserving outstanding free-flowing rivers. A 147 mile segment of the John Day River from Service Creek to Tumwater Falls was added to this system in 1988 when it was designated as a Federal Wild and Scenic River by the Omnibus Oregon Wild and Scenic Rivers Act of 1988. As defined by the Act, a National Wild and Scenic River must be free-flowing and have at least one outstandingly remarkable value. The "Outstandingly Remarkable Values" of the John Day identified by Congress in the Congressional Record include: scenery, recreational opportunities, and fisheries. Archeological, paleontological, geological, historical and hunting values were other significant attributes identified in the legislation though not classified as "Outstandingly Remarkable Values". (See Appendix E for a comparison of Congressionally recorded values and the values found in this report).

The river section from Parrish Creek to Tumwater Falls was included in the Oregon Scenic Waterways Act established by the water initiative in 1971. The Oregon State Scenic Waterways System includes free-flowing waterways considered to possess one or more "outstanding scenic, fish wildlife, geological, botanic, historic, archaeologic, and outdoor recreation values of present and future benefit to the public" (ORS 390.805). For each scenic waterway, Oregon State Parks and Recreation Department determines which resources within the corridor will be considered "special attributes" and, therefore, subject to rules and recommendations for protection or enhancement of these attributes. To date, special attributes of the John Day River have not been identified.

The same section was studied by the National Park Service in 1979 to determine whether the river qualified and should be designated as a component of the National Wild and Scenic Rivers system. The study concluded that the river qualified for designation and was sent to the Governor of Oregon for consideration but was never acted on.

Under the Wild and Scenic Rivers Act, the BLM is required to prepare a comprehensive river plan to provide for the protection of the river values. This plan, of which the resource assessment is the start, will use the Limits of Acceptable Change (LAC) planning process while at the same time comply with the National Environmental Policy Act (NEPA) planning regulations. The planning steps include identification of issues, concerns and opportunities associated with activities along the John Day River which will then be translated to management objectives and measurement criteria for meeting the objectives. From this, a range of management alternatives are developed, evaluated, and the preferred alternative chosen. The preferred alternative becomes the more detailed river management plan and includes provisions to monitor the effectiveness of management in meeting the objectives of the plan. Through each phase of the planning process, public involvement will be invited, and will be essential for the success of a sound management plan. (See appendix B for the public involvement plan).

I. THE RESOURCE ASSESSMENT PROCESS OVERVIEW

To become a component of the National Wild and Scenic Rivers System, a river must be "free-flowing" in that it can not have any major impoundments or diversions along its course. The river must also possess one or more "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar value". The purpose of this document is to determine and define what those "outstandingly remarkable" values are and how they relate to the river.

In designating the John Day River as Wild and Scenic, Congress mandated the preparation of a management plan for the river. The importance of a thorough resource assessment (RA) cannot be overstated. The RA serves as the foundation of the river management planning process. It determines which river-related features or attributes are truly outstandingly remarkable and which values contribute substantially to the river setting and the functioning of its ecosystem. This assessment will guide interim management, provide the basis for developing a joint federal and state river management plan and assist in the determination of Federal Wild and Scenic River boundaries.

The RA process is used to determine the degree of significance of river-related values. The decisions are based on available data and informed professional judgement. The RA process was developed by government agencies with input from knowledgeable organizations and individuals. The process provides a degree of standardization and consistency on Wild and Scenic River planning throughout the northwest. It is an objective process accomplished through the use of an interdisciplinary team knowledgeable of the National Wild and Scenic Rivers program, the particular resource values to be considered and the river or area to be studied. Information from other experts is obtained though consultation, document review and/or direct involvement as needed. An analysis is conducted to compare resource values with other rivers within a particular physiographic or demographic region. As a basis for comparison, geographic regions defined in Oregon's Statewide Comprehensive Outdoor Recreation Plan (SCORP) are partially used (see map on page 5).

The John Day Wild and Scenic River is located in SCORP Region #10, incorporating Hood River, Sherman, Wasco, Jefferson, Wheeler, Crook and Deschutes Counties. The region is flanked by the Cascade Range to the west with the Columbia River forming its northern boundary. This region also contains designated portions of the Deschutes, Crooked, North Fork of the Crooked, and White Wild and Scenic Rivers. (For additional discussion of the resource assessment process, see Appendix D). Essentially, the resource assessment process should answer the questions "What is special about the John Day Wild and Scenic River and what additional information is needed to develop a management plan for the river and properly manage and protect those values?"

The following steps or verification techniques were used to evaluate the contribution of various resource values to the John Day River:

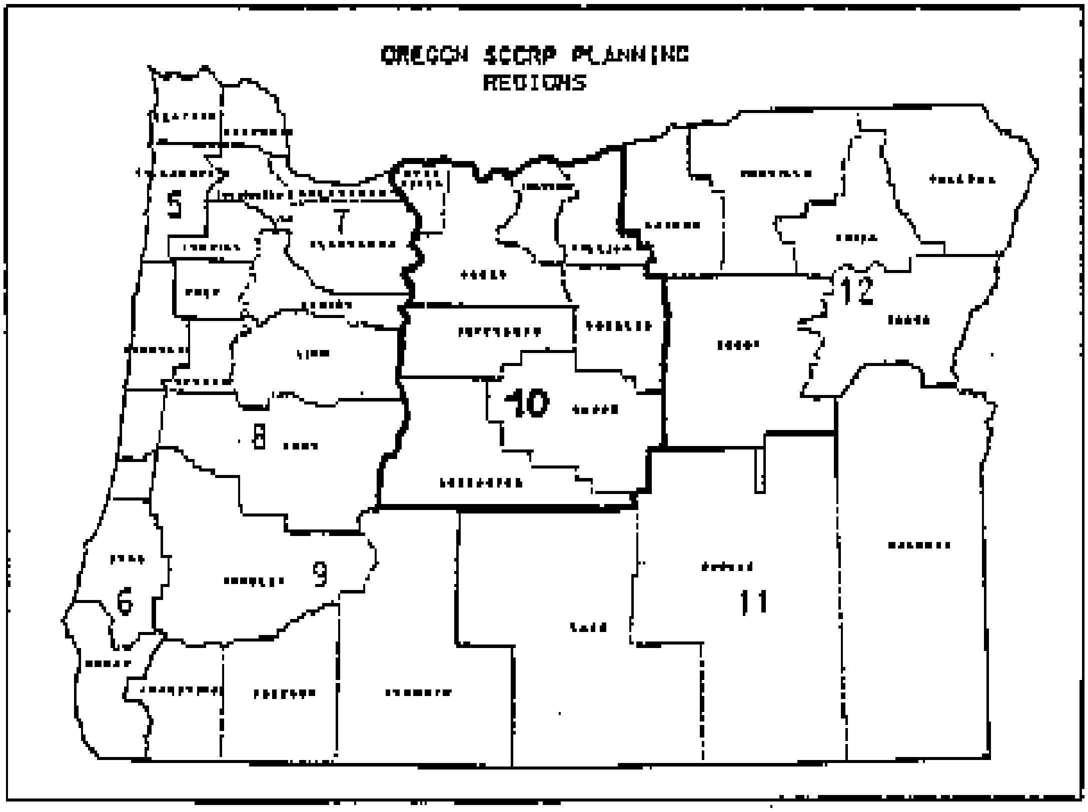
- The use of an interdisciplinary team approach
- Consideration of uniqueness and rarity at a regional and national level

- Consideration of values identified in previous studies and reports (see appendix A)
- Values must be river related in that they owe their existence or contribute to the functioning of the river system and its immediate environs.
- The use of standardized criteria against which river values were measured to determine outstanding remarkable value
- Verification by other experts in the subject area
- Public verification of preliminary findings of outstandingly remarkable value

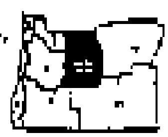
This resource assessment will evaluate the following John Day River resources:

+ Scenic
+ Recreational
+ Fish and Wildlife
+ Historic/Cultural
+ Botanic/Ecological
+ Geologic/Paleontologic
+ Pre-historic/Traditional Use
+ And other similar values

1989
State Comprehensive Outdoor Recreation Plan
Region Map



Central - Region 10



Counties: Wasco, Hood River, Sherman, Gilliam, Wheeler, Jefferson, Deschutes and Crook.

This central Oregon region is bordered by the Cascade Range on the west. The Columbia River Gorge (which is now a National Scenic Area) forms the northern boundary. [illegible] throughout this river gorge. East of the Cascade Range is the north central plateau that was formed by a series of lava flows which covered southern Washington and most of eastern Oregon over 15 million years ago. This weathered plateau is carved by the John Day, Deschutes, Metolius and Crooked Rivers.

The primary tree species in the region is ponderosa pine. The forests are interspersed with fir, larch, [illegible] and lodgepole pine, along with [illegible], western juniper and sagebrush. The central plateau is dominated by grasslands [illegible] for farming and ranching. In areas where native vegetation remains, the dominant species are bluegrass, wheatgrass, fescue and a variety of herbaceous plants.

CENTRAL OREGON
REGION 10

		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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III. RIVER DESCRIPTION

The John Day River Canyon is situated primarily in a semi-arid area in northeastern Oregon. The 147 mile segment of the John Day River mainstem designated in the National Wild and Scenic Rivers System is located 110 miles east of Portland, 20 miles west of Fossil and Condon, and includes the river between Service Creek and Tumwater Falls. This segment flows west from central Wheeler County, turning north at the Jefferson County line, and then empties into the Columbia River approximately 4 miles east of Rufus. The north flowing segment forms the boundaries of Wheeler, Wasco, Sherman, and Gilliam Counties.

The Act designated the 147 miles between Service Creek and Tumwater Falls as a recreational river. Boundaries and acreage identified in this report are subject to revision based on further analysis of existing and new information in the preparation of specific river management plans.

Land Ownership Within the John Day Wild and Scenic River Preliminary Boundaries:

	Miles Land Ownership	Acreage
BLM	151	27,466
Private	137	19,005
State	7	126
Total	147.5 x 2 = 295	46,597

The entire Wild and Scenic portion of the John Day River is administered by the Bureau of Land Management through interagency cooperation with other federal, state and local government agencies. The segment between Service Creek and Tumwater Falls was designated a scenic waterway by the State of Oregon in 1971 with an additional 13 miles above Service Creek being added in 1988. (This 13 mile segment is not within the National Wild and Scenic River boundary). State Scenic Waterway boundaries are located one quarter mile from the mean high water line on both sides of the river. The State of Oregon also established the John Day River Wildlife Refuge from Thirtymile Creek to the Columbia River in 1933 to protect nesting waterfowl. No waterfowl hunting is allowed in this area. In addition, the Oregon State Marine Board closed to motorized boat use the section of river from Clarno to Tumwater Falls between May 1 and October 1.

Portions of the Lower John Day, Thirtymile, and North Pole Ridge Wilderness Study Areas (WSAs) are included in the proposed Wild and Scenic River boundaries for a total of approximately 46 river miles. Portions of the Spring Basin WSA are also included in these preliminary boundaries for a total of approximately 1 river mile. Spring Basin WSA additionally borders approximately 2.5 miles of the preliminary Wild and Scenic boundary.

Stream discharge in the designated section is marked by extreme variability in both timing and quantity. In certain sections, the river has essentially stopped flowing some years during August and September but has also reached a peak discharge in December, 1964, of over 42,000 cubic feet per second. These extreme flows affect recreational boating and fishing use levels on the river. There is little or no recreational development on this portion of the river and few vehicle access points exist.

.. DESCRIPTION AND EVALUATION OF RESOURCE VALUES

SCENIC VALUES

Criteria for Outstandingly Remarkable Rating

The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions within the geographic region. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment length and not common to other rivers in the geographic region.

DISCUSSION OF SCENIC VALUES

The majority of the land adjacent to the designated portion of the river is primitive and undeveloped. It is an area of high plateaus bisected by the river and it's tributaries. The river winds alternately through gentle farm valleys, majestic basalt cliffs that reach heights of over 1,000 feet, and steeply sloped hills covered with grass and sagebrush. Oregon River Tours, a guidebook for Oregon rivers, states that the lower John Day River rates high on the list as a "scenic desert wilderness river tour" (Garren, 1979).

Early morning and late afternoon shadows highlight the towering, desert buttresses of the river canyon. In contrast to the rugged, golden hills, riparian vegetation laces the river's edge and rocky side canyons with a lush green hue. Juniper trees scattered throughout the canyon create additional areas of green. Spring and summer wildflowers produce a sprinkling of color and fragrance while, in places, exposed volcanic ash deposits add unusual shades of blues, greens, whites and reds to the landscape. Erosion and oxidation of some of the basalt columns and pillars have created interesting formations and colors that have become scenic landmarks for river visitors.

The primitive setting and largely natural scenic viewshed from Butte Creek to Cottonwood Canyon provides river visitors with a sense of wildness and remoteness. This is evidenced by the fact that there are three Wilderness Study Areas located in this section. A more pastoral setting, created mostly by alfalfa fields, intermingles with the primitive view in the Service Creek to Butte Creek and the Cottonwood Canyon to Tumwater Falls sections. The location of the Spring Basin Wilderness Study Area confirms that there are still wild areas within this more rural portion. In a 1983/84 survey conducted by Oregon State Parks Division, most river users indicated that solitude, scenery and wildlife were very important aspects of their visit to the John Day River.

Cultural modifications to the landscape are mostly a product of ranching and farming and include such things as fences, spring developments, livestock, irrigation pumps, and a few private airstrips and primitive dirt roads and ways. Bridges, with their associated highways, cross the river at four locations and a powerline can be seen for approximately 4 miles from Devil's Canyon to Cottonwood. This powerline crosses the river again approximately 1.5 miles above Rock Creek. Some evidence of a pipeline and a fiber optics line cross the river at Thirtymile Canyon. Military jets and small, privately owned planes occasionally fly over and into the river canyon. Most of the modifications to the landscape occur in segments D (Tumwater Falls to Cottonwood Bridge) and segment B (Butte Creek to Service Creek). The ranching and farming modifications create a more pastoral setting, providing approximately 90 miles of a different type of scenic experience in contrast to the wildland of segment C (Cottonwood Bridge to Butte Creek) which covers approximately 57 miles of the river corridor.

PRELIMINARY FINDING

As found by Congress, the scenic resource of the John Day River is determined to be an outstandingly remarkable value. The rural and wild settings and unique features along the river attract visitors on a regional and occasionally national and international basis. Cultural modifications to the landscape are either temporary or not significant enough to seriously affect the classification of scenic values as outstandingly remarkable. The opportunity exists to enhance the scenic values along some segments of the river by adopting range management techniques designed to improve the riparian zone, help naturalize the river banks, and by planting native woody riparian species.

RECREATIONAL VALUES

Criteria for Outstandingly Remarkable Rating

Recreational opportunities are, or have the potential to be, unique enough to attract visitors from outside of the geographic region. Visitors would be willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but not be limited to, sightseeing, wildlife observation, photography, hiking, fishing, hunting, and boating.

Interpretive opportunities may be exceptional and attract or have the potential to attract visitors from outside the geographic region.

The river may provide or have the potential to provide settings for national or regional usage or competitive events.

DISCUSSION OF RECREATIONAL VALUES

Considerable recreation opportunities can be found along the John Day River. Hunting, fishing and whitewater boating constitute the most significant (recreational) uses. Camping, picnicking, sightseeing, rockhounding, photography, swimming, and wildlife watching are also enjoyed by river visitors as are the viewing of historic and archeological sites. At this time, there is little or no recreational related development along the Wild and Scenic portion of the river except for two pit toilets at Clarno and Cottonwood highway bridges.

..e geological formations of the basin offer opportunities for scenic viewing and fossil hunting. The John Day Fossil Beds National Monument, and other areas in the vicinity, contain outstanding fossils of international significance. These fossils are protected under the Antiquities Act and therefore collection is not permitted.

Hunting seasons run from September through mid-January for waterfowl/upland birds and from October through November for the various deer seasons, accounting for an approximate total of 18,000 visitor use days. Superior bass and steelhead fishing attract anglers to total approximately 10,000 visitor use days annually.*

Whitewater boating use by raft, drift boat, canoe, or kayak totals approximately 6,500 visitor use days from Service Creek to Cottonwood Creek. No data has been collected concerning boat use between Cottonwood Creek and Tumwater Falls but it is suspected that comparatively little boating occurs in that river stretch. Most boat use is concentrated during the peak water flows of late spring and early summer; low summer/fall water flows and cold winter weather discouraging use in other seasons.

Boating on the John Day River is characterized by a variety of fast to slow moving water, intermixed with a few moderately challenging rapids. Floating opportunities range from one day trips to week-long excursions and from reasonably accessible areas to the extremely remote. Motorized boating activity is closed from May 1 to October 1 in the area from Clarno to Tumwater Falls.

The unconfined primitive recreation opportunities along the river attract many visitors. Current total use estimates are not presently available for the Wild and Scenic portion of ..e river. Surveys taken by the BLM during the heavy river use months (April to June) from 1986 to 1989 found that 78% of the visitors came from Oregon, 35% of that figure being from the Central and Eastern portions of the state while 63% hailed from west of the Cascades. The other 2% were from Southwestern Oregon. Commercial guides permitted by the BLM to use the John Day River numbered 49 in 1989 and 29 in 1991. Despite the apparent decline, commercial use on the John Day is expected to increase in the coming years.

Of those who were not from Oregon, most were found to be from neighboring states, Washington being mentioned most frequently. An ODF&W survey of anglers during November through March of 1987/88 revealed a much higher percentage of visitors from the John Day River Basin and nearby region with only 3% of the anglers being from out of state. International visitors probably make up at least part of both out of state figures.

PRELIMINARY FINDING

Unlike the neighboring Deschutes River, the John Day offers more primitive and unconfined recreational opportunities as well as less technical rapids for the novice boater. The diversity and quality of opportunities such as hunting, fishing, rafting, camping, day use, and scenic viewing constitute recreation as an outstandingly remarkable value. This finding agrees with the Congressional record.

Both the John Day Fossil Beds National Monument and the Oregon Museum of Science and Industry's Hancock Field Station provide a variety of interpretive services in the region but there are many other rich interpretive opportunities yet to be tapped that have potential to attract visitors from outside the geographic region.

*One visitor use day equals one person visiting the river for a 12-hour period.

FISHERY VALUES

Criteria for Outstandingly Remarkable Rating

Fish values may be judged on the relative merits of either fish populations or habitat, or a combination of these river-related conditions.

Populations The river is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or threatened and endangered species.

Habitat The river provides exceptionally high quality habitat for fish species indigenous to the region. Of particular significance is habitat for wild stocks and/or federally listed or candidate threatened and endangered species.

DISCUSSION OF FISHERY VALUES

The entire John Day River Basin contains one of the few remaining wild fish runs in the Pacific Northwest with approximately 43,000 steelhead and 5,000 Chinook salmon returning each year for spawning (1988 figures). The summer steelhead and spring Chinook returning to the John Day each year for spawning make up the largest entirely wild run in the mid and upper Columbia River Basin, making the river of regional significance. A remnant fall Chinook population spawns in the lower mainstem but is estimated to be made up of less than 100 individuals.

The fact that this river is the longest free flowing river in the Columbia River Basin significantly influences the success of these runs of wild fish. In a recent Nation-wide Rivers Inventory report, the John Day was found to be one of only 42 high quality rivers left that is greater than 200 kilometers in length without any major dams. Due to the scarcity of riparian habitats in the general area, the John Day River and associated riparian habitat are important to both fish and wildlife.

In addition to the anadromous fisheries, the designated segment contains prime habitat for smallmouth bass and a healthy population presently exists. Rainbow trout also inhabit the John Day River as do whitefish, northern squawfish, brown bullhead, sucker, channel catfish, red-sided shiners, chisel-mouth chub, coddit, carp, and lamprey.

This fishery has recently received attention in national publications and is becoming increasingly popular with anglers. Most of the commercial boating guide activity on the John Day River is associated with fishing and recreational angling accounts for 10,000 visitor use days annually.

This segment of the John Day River serves primarily as a migration corridor for all adult and juvenile chinook and steelhead. Currently, this habitat supports production of approximately two percent of the basin's total summer steelhead population. As many as 600 adult steelhead spawn in the subbasin each year.

Other species found in this segment include: redband rainbow trout, smallmouth bass, Pacific lamprey, bridgelip sucker, and speckled and long nose dace.

.e majority of habitat in the subbasin is only marginally productive for anadromous fish compared to habitat in the upper watershed. The mainstream river channel is largely undefined, wide, and shallow. Low flows, sedimentation, lack of riparian cover, and high summer stream temperatures limit productivity and survival.

ODFW currently plants hatchery raised rainbow trout in the areas with high angling pressure in order to reduce the catch of wild fish. They also use fall spawning fish which reduces hybridization with the spring spawning red band rainbow trout and steelhead (ODFW 1992). Creel studies by ODFW indicate that over 90 percent of the catch was planted hatchery rainbow.

Based on the available archaeological and ethno-historic information, a variety of fishery resources were exploited within the John Day River Basin most recently by groups belonging to the Confederated Tribes of the Warm Springs and Umatilla. Treaties signed by both groups in the 1950's with the U.S. government provide for fishing rights "in the streams running through and bordering said reservation(s)... and at all other usual and accustomed stations in common with citizens of the United States..." Data on the current use of the river by these Native American groups is non-existent, but formal queries may reveal that fishing activities are occurring.

PRELIMINARY FINDING

The quality, quantity, aesthetic, and economic importance of the fish habitat and its resulting resident and anadromous fish populations qualify this resource as an outstandingly remarkable value. This finding confirms the Congressional record relating to fisheries values of the John Day River.

Historic accounts of steelhead and salmon runs were considerably larger than counts today. Approximately 80% of the fish habitat in the basin is currently degraded due to human activities and is in early seral condition. Such habitat conditions substantially reduce production of steelhead and salmon. With habitat improvement, however, steelhead and salmon numbers could significantly increase.

WILDLIFE VALUES

Criteria for Outstandingly Remarkable Rating

Wildlife values may be judged on the relative merits of either wildlife populations or habitat - or a combination of these conditions.

Populations The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique or populations of federally listed or candidate threatened and endangered species. Diversity of species is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

Habitat The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, or may provide unique habitat or a critical link in habitat conditions for federally listed or candidate threatened and endangered species. Contiguous habitat conditions are such that the biological needs of the species are met. Diversity of habitat is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

DISCUSSION OF WILDLIFE VALUES

The variety of fish and wildlife species in the collective John Day River Basin may be more diverse than in any other river system in the entire state of Oregon. This is mostly due to the diversity of habitats found there. Mixed sagebrush/grass sidehills, rock outcrops of the canyon walls, and riparian habitats make up the designated lower reaches. Most of the upland vegetation is in late seral * status making it good habitat for wildlife.

Though in early seral status, riparian areas are the most critical habitat for wildlife. The majority of wildlife in the Basin are either directly dependent on these areas or use them more than other habitats. Streamsides create a well-defined zone between the water's edge and drier surrounding areas. The moist soil conditions support a more diversified vegetative community than found elsewhere, in turn affecting wildlife diversity. Streamside areas provide, in close proximity to water, many varieties of food, shelter from extreme climatic conditions, cover for nesting and hiding, and corridors for travel over long and short distances.

One threatened species, the bald eagle, is documented to occur along the entire river during the winter months, utilizing large snags for roosting and perching. Bald eagle use of the John Day appears to be increasing as the regional population increases. Though no recent sightings are confirmed, the endangered peregrine falcon may also utilize the area, most likely on a migratory basis. Prairie falcons, golden eagles, and red-tailed hawks nest in the river canyon. Osprey are also found along the John Day.

Waterfowl, shorebirds, heron, and upland game and perching birds can be found in the riv corridor. Nesting by Canada geese has been increasing yearly with the river now providing habitat for several hundred birds yearlong. A variety of ducks live within the corridor. The Oregon Department of Fish and Wildlife has designated a special wildlife protection area from Thirtymile Canyon to the Columbia River primarily to protect migrating waterfowl and to reduce the pressure from hunting.

Common animals in the area include mink, coyote, river otter, bobcat, beaver, Western fence lizard, Pacific treefrog, and rattlesnake. Mule deer use the river yearlong with the most concentrated summer use in the riparian zone. Rocky Mountain elk sightings are increasing in the area. Historically, California bighorn sheep, a Category 2 Federal candidate species, occupied the Basin. In January of 1989, the Oregon Department of Fish and Wildlife and the Bureau of Land Management reintroduced fourteen bighorn sheep near Thirtymile Canyon, and in January 1990 thirteen bighorn were released near Horseshoe Bend. A winter count in January 1992 found 65 total bighorn.

Several species of warblers, vireos, and swallows migrate into the John Day Basin to nest. Many of these species utilize riparian areas for nesting and foraging while others utilize upland areas within the canyon. More information is needed to determine present and potential population levels for these species.

* In reference to "ecological succession", which is defined by Ecology and Field Biology (Smith 1966) as "an orderly and progressive replacement of one plant community by another until a relatively stable community occupies the area."

due to the human use of the resource, present early seral conditions limit wildlife habitat especially within the riparian zone. This significantly reduces habitat availability thereby reducing wildlife populations and diversity as well. Many of the side-drainages flowing into the John Day River are evaluated to be in poor to fair condition. To promote the integrity of the main channel, it is important to manage for an improved ecological status. An increase in ecological condition simultaneously involves an increase in plant diversity, which in turn supports an increase in wildlife diversity. It also improves the habitat in which these species live.

Two species of bat listed on the Oregon Natural Heritage Program list (1991) occur within the Wild and Scenic River corridor: The Townsend's big-eared bat and the spotted bat. More information is needed to determine which bat species occur in the corridor in addition to present population levels and key use areas.

Hunting constitutes one of the most popular forms of recreation in the Basin, accounting for approximately 18,000 visitor use days annually. Game species include mule deer, upland game birds such as California valley quail and chukar, and waterfowl. The John Day River also provides outstanding opportunities for wildlife viewing and there is great potential for interpretation of the Basin's wildlife as well. These non-utilitarian recreational pursuits are becoming more and more popular along the John Day River.

Available archaeological and ethno-historic information reveals that a wide variety of wildlife resources were exploited within the John Day River Basin, most recently by groups belonging to the Confederated Tribes of the Warm Springs and Umatilla. Treaties signed by both groups in the 1850's with the U.S. government provide for "... the privilege of hunting... on unclaimed lands in common with citizens, is also secured to them". Hunting rights on ceded lands continue today and are regulated by the respective tribes similarly to those imposed on the Euro-American population. Whether or not hunting activities are occurring within the river corridor is not known.

PRELIMINARY FINDINGS

The quality and diversity of habitat in the John Day river corridor qualifies this resource as outstandingly remarkable. The presence of threatened and endangered species such as the bald eagle, peregrine falcon and osprey, and regionally important populations of indigenous wildlife species assures this classification. The excellent opportunity to view wildlife in this area is also taken into consideration.

GEOLOGIC/PALEONTOLOGICAL VALUES

Criteria for Outstandingly Remarkable Rating

The river or the area within the river corridor contains an example(s) of a geologic feature, process, or phenomena that is rare, unusual, one-of-a-kind, or unique to the geographic region. The feature(s) may be in an unusually active stage of development, represent a "textbook" example and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, and other geologic structures).

DISCUSSION OF GEOLOGIC/PALEONTOLOGICAL VALUES

The John Day Basin has a complicated geologic history which has resulted in a complex and diverse assemblage of rocks exposed at the earth's surface. These rocks include masses of oceanic crust, marine sediments, intrusive bodies, a wide variety of volcanic materials, ancient river and lake deposits, and recent river and landslide deposits. High potential exists for paleontological resources in the Clarno, John Day, and Mascall formations within the designated area. These beds are famous for plant and vertebrate fossils of international significance.

There are portions of the river where the traveller is exposed to extraordinary outcrops of Clarno basalts, lahars, and assorted volcaniclastics, many of them right at the river level. These offer excellent material for study of volcanic processes and related depositional environments.

The oldest exposed rocks in the designated area comprise the Clarno Formation of Eocene age. The Clarno Formation consists of sediment deposits of shales, sandstones, and conglomerates, interbedded with volcanic tuffs and lavas. The sequence may be as much as 2,000 feet thick locally.

Overlying the Clarno Formation is the Oligocene John Day Formation, known for its vertebrate fossils. These variegated tuffs and shales outcrop thickly in several areas along the John Day River.

The Columbia River Basalts, here considered to be part of one of the world's largest continental basalt flow formations, overlie the John Day Formation. These are distinctive flood basalts deposited during the Miocene, and are still essentially horizontal in the designated area. The John Day River cut a dramatic cross section through this plateau as it formed the John Day Canyon. In some places, basalt cliffs rise over 1,000 feet above the river or have eroded into unusual and interesting shapes, adding to the scenic qualities of the canyon.

During the Pliocene age, tufaceous sedimentary rocks and tuffs were deposited in the northernmost area of the John Day River.

Landslide and debris flow deposited during the Pleistocene age occur as unstratified layers comprised of mixtures of basaltic, andesitic, tufaceous, and sedimentary bedrock. Recent rock and gravel deposits form bars and beds along the canyon.

River segment B, which extends from the mouth of Butte Creek (RM 95) to Service Creek (RM 155), passes very near the Clarno Unit of the John Day Fossil Beds National Monument just east of Clarno at RM 110. Fossil bearing exposures occur within the river corridor throughout this segment. No formal inventories have yet been conducted within the corridor but several locations are known or are considered highly likely to contain significant vertebrate and botanical specimens. Paleontological inventories will need to be conducted prior to any ground disturbing activities.

PRELIMINARY FINDING

The Congressional record found geologic/paleontologic values to be significant on the John Day River. Further investigation through this report reveals that the geologic/ paleontologic features and opportunities for scientific research, interpretation, and aesthetics available on the river are an outstandingly remarkable value.

Given the proximity to the John Day Fossil Beds National Monument and the likelihood of discovering additionally significant localities, paleontological resources within segment B should be considered to be especially outstandingly remarkable. Of major importance to this finding is the international significance of the paleontological resources located in this area.

BOTANICAL VALUES

Criteria for Outstandingly Remarkable Rating

The river or area near the river must contain nationally or regionally important populations of indigenous plant species. Of particular importance are species considered to be unique or populations of federally listed or Candidate Threatened and Endangered Species. When analyzing vegetation, additional factors such as diversity of species, number of plant communities and cultural importance of plants may be considered.

.ISCUSSION OF BOTANICAL/ECOLOGICAL VALUES

Containing pristine plant communities as well as interesting plant species, the corridor along the John Day Wild and Scenic River offers the visitor unparalleled opportunity to experience the natural landscape of north-central Oregon.

Immediately adjacent to the river, the riparian zone offers lush, green vegetation important to wildlife and natural hydrologic processes. Although past use has not been kind to this important vegetation, improved grazing management promises a slow, but steady recovery. In contrast to the cool, inviting riparian areas, the adjacent canyon slopes offer little hope of relief to the traveler. These dry, steep, rocky hillsides, protected from unregulated grazing and agriculture by their topography and inaccessibility, contain the remnants of a once-great grassland. Dominated by vast acreage of bluebunch wheatgrass (Agropyron spicatum), these slopes appear much as they did hundreds of years ago.

Volcanic clays of varying hues and textures bear testimony to the fiery birth of much of the landscape along the river. Here, in these clay soils, are several species of plants endemic (of limited range, only found here) to this part of Oregon. Early spring moisture often causes these otherwise barren clay slopes to be ablaze in a carpet of yellow wildflowers. An assortment of unique plants on the rocky ridges tempt one to hike to the top. All in all, 16 plants of some degree of importance as "special status species" are known or suspected in the river corridor, including three candidates for listing as endangered or threatened.

The designated area contains vegetation representative of a potential natural community PNC) bluebunch wheatgrass ecosystem. (PNC is the relatively stable, final stage in the succession of vegetation types, generally equated with pristine). There are opportunities to study native range sites which could be useful for vegetative comparison and could be maintained as pristine plant reserves. This could be beneficial for future genetic experiments.

The available archaeological and ethno-historic information reveals that a wide variety of plants were exploited within the John Day River Basin most recently by groups belonging to the Confederated Tribes of the Warm Springs and Umatilla. Treaties signed by both groups in the 1850's with the U.S. government provide for "the privilege of ... gathering roots and berries... on unclaimed lands in common with citizens, is also secured to them". Recent information suggests that traditional gathering practices are still being pursued by tribal members, but no specific data exists on the use of plant resources within the river corridor.

PRELIMINARY FINDING

The John Day Wild and Scenic River corridor contains a relatively pristine bluebunch wheatgrass plant community coupled with the potential presence of 16 special status plant species. In addition, the unique contrast between riparian and high-desert upland vegetation provides important wildlife habitat and aesthetic values to the area. There is opportunity to improve the qualities of the John Day River's vegetative community in the riparian zones and on the alluvial flats through range management. Scientific study and interpretive opportunities also exist in the area. Should future inventories establish the presence of additional special status plant species, this finding could be upgraded to outstandingly remarkable. However, since all of the known or suspected special status plants occur elsewhere in the greater John Day River watershed (i.e.the river corridor contains only a fraction of their known habitat) and since the PNC bluebunch wheatgrass communities also occur elsewhere on similar steep slopes, these botanical/ecological values can only be found to be significant rather than outstandingly remarkable.

PRE-HISTORIC, TRADITIONAL USE

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes. Of particular value will be pristine sites that have not been disturbed.

Discussion of Pre-historic, Traditional Use

Some of the John Day River corridor has been surveyed for cultural resources. Nearly 100 prehistoric sites have been recorded, which represent the full range of human activities including pithouse villages, rockshelters, pictograph sites, rock feature sites, tool manufacturing sites, and a few buried sites whose character can not be determined without scientific excavation. These sites indicate intensive occupation by indians over the last several thousand years and many are very significant. Three sets of archaeological sites are potentially eligible for inclusion in the National Register of Historic Places. The Bureau of Land Management, recognizing the value of archaeologic sites on public land, plans to nominate several of these sites to the National Register.

Many sites have high potential to provide information about past cultures and their use riverain resources. There are excellent interpretive opportunities. About half of the known sites are in fair to poor condition with the greatest threat to these fragile resources being the continued illegal digging and surface collection of prehistoric artifacts.

Available data is limited concerning use of the river corridor for traditional use or religious practices. According to the involved Native American groups, any area where native plants and animals occur are considered traditional use locations. This would indicate that a majority of the BLM lands within the corridor could be used for traditional use practices, including grazing, as provided in the treaties for each tribe. A concerted effort to conduct ethnological and ethnobotanical research should be pursued in order to illuminate our current understanding of the past use of the river canyon. Recent religious practices within the river corridor are unknown and will most likely remain so for obvious reasons. Again, ethnological work would probably be useful for providing a general knowledge about certain ceremonies and practices without revealing particular significant locations, other than in general terms.

River segment D

Segment D, covering the area from Tumwater Falls (the Narrows) south to the Cottonwood Bridge, has been selectively inventoried for cultural resources by Polk (1975). This small sampling revealed the occurrence of only a few prehistoric sites. Based on this and other archaeological studies conducted at the mouth of the John Day River, it appears that human occupation in the lower part of the canyon extends back some 8,000 years (Schalk 1987). It has been suggested that the interior portion of the canyon was most heavily used after about 5000 years ago, although no formal testing/evaluation has been conducted to substantiate this.

Ethnographically, the area has traditionally been utilized by the Tenino group of Sahaptian speakers, primarily for fishing. Several villages are known to have occurred in the lower reaches of the river, although their exact location has not been discovered.

River segment C

River segment C, extending from the Cottonwood Bridge to the mouth of Butte Creek (approx. RM 95) has been extensively inventoried by Polk (1976). Within this particular stretch of the river Polk recorded 59 prehistoric sites. An additional 5 prehistoric sites have been located since that time. Others surely exist that have yet to be discovered. Site types recorded include pit house villages, isolated pit houses, rockshelters, lithic scatters, pictographs and petroglyphs, and rock features. The nature of several of the prehistoric sites is undetermined because they are buried by river sediments. Many of the sites are in good condition, but those nearest to access points, and a few which are not, have been badly damaged by vandals. No formally reported cultural resource excavations have been conducted within this segment.

Ethnographically, the area was utilized by the Tenino group of the Sahaptian speaking language family. Little is known about the area. Few of the ethnographic studies mentions the use of the canyon specifically. It is assumed that the fisheries played an important role in the canyons occupation. However, observable evidence at the sites suggest that hunting and gathering were as important, if not more so. No known ethnographic villages have been identified in this segment.

River segment B

River segment B, which extends from the mouth of Butte Creek (RM 95) to Service Creek (RM 155), was partially inventoried for cultural resources by Polk (1976). A small number of sites were located during the examination of this segment. These consisted of rockshelters (one with pictographs), one pit house village site, and several open lithic scatters. Cressman (1937, 1950) recorded several pictograph sites and tested a rockshelter near RM 120. The results of the testing were inconclusive and provided little data. Work conducted in the Pine Creek (Gannon 1966, 1970, 1972; pers. comm. Endzweig 1991) and Muddy Creek (U.S.D.I., BLM CR Report 86-05-03) areas near Clarno has revealed that occupation in the vicinity of the segment extends back as far as 7,000 years ago, with most occurring later than 2500 B.P.

Ethnographically, this segment falls on or near the boundary between the Tenino group of Sahaptian language speakers and the Northern Paiute who are part of the Numic language group (Stewart 1939). It currently is within the ceded lands of the Confederated Tribes of the Warm Springs. Farmer et al. (1973) indicate that an aboriginal trail existed along the northern side of the river along this segment, joining with another on the west side of the river near Clarno. No known Native American religious sites or traditional use areas exist within the corridor of this particular segment.

PRELIMINARY FINDING

River segment D

Although specific data about prehistoric sites along the lower course of the river is limited, segment D contains the only site to be formally studied within the whole of the river system. The potential for locating additional prehistoric sites which may contribute significantly to our understanding of the prehistory of the John Day River canyon is high.

Our general lack of knowledge regarding the prehistory of the Deschutes-Umatilla Plateau, especially the John Day River canyon, creates a circumstance where all prehistoric sites can be considered significant. The fact that sites located along the lower segment of the river may have had connections with the ethnographic past only imparts additional importance to there potential human interest values. Therefore, all cultural resources along this segment are outstandingly remarkable.

River segment C

Segment C of the river contains a great variety and concentration of prehistoric sites. It has been recommended that several of the prehistoric site concentrations be designated as archaeological districts. The nature of the sites provide excellent opportunities to significantly increase our current data base of knowledge concerning prehistoric occupation. Therefore, all cultural resources within this segment are outstandingly remarkable.

General lack of knowledge regarding the prehistory of the Deschutes-Umatilla Plateau, especially the John Day River canyon, creates a circumstance where all prehistoric sites can be considered significant. This is particularly true because of the variety of prehistoric sites occurring along this segment of the river have high potential for scientific research. Therefore, all cultural resources within this segment are outstandingly remarkable.

River segment B

Although cultural resource inventories have been somewhat limited along segment B, the findings have been significant. The available evidence suggests that a variety of prehistoric sites exist which could provide important information about our understanding of past lifeways. This especially important when we consider the prehistoric situation and its boundary setting. Additional inventory and evaluation will need to be performed prior to any proposed ground disturbing activities.

Given the unknown nature of the prehistory of the Deschutes-Umatilla Plateau, especially the John Day River canyon, all sites must be considered potentially significant at this time. The additional fact that this segment is situated along a known cultural boundary provides added importance to these resources. Therefore, all prehistoric sites along this segment are outstandingly remarkable.

All Segments

On the river overall, evidence of human occupation for the last several thousand years and the presence of three sites with National Register potential indicate that the designated corridor of the John Day River possesses archeological values that are outstandingly remarkable. This upgrades the Congressional record finding of "significant" relating to the archeological values of the John Day River. In addition, these sites were used concurrently by several cultural groups and have regional importance for interpreting prehistory. The river corridor is also an important traditional use area to Indian tribes and is associated with treaty rights on ceded lands.

.STORIC, CULTURAL VALUES

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual, or one-of-a-kind in the region. A historic site(s) and /or feature(s) in most cases is 50 years or older. Of particular significance are sites or features listed in, or are eligible for inclusion in, the National Register of Historic Places.

DISCUSSION OF HISTORIC/CULTURAL VALUES

Historic sites in the designated corridor offer special qualities for cultural resource studies, aesthetics, and interpretation. Twenty-six historic sites have been documented which represent primarily dispersed settlement associated with livestock grazing and transportation-related features in the late 19th and early 20th centuries. Some sites are so significant that they are potentially eligible for designation on the National Register of Historic Places.

The historic sites include cabins that are associated with homesteading or stockraising, machinery left from a ferry crossing, three wagons left from a 1920s movie set, and a rockshelter used for a still. The Oregon Trail, a significant western immigrant route, crossed the John Day River at McDonald Ford and is a potential National Register of Historic Places property as well.

River segment D

The primary historic use of this segment occurred at McDonald Ford. This was the primary crossing point of the river for thousands of Oregon Trail emigrants between the 1840's and 1860's. In 1858, a ferry was built at the crossing. Later transportation routes used this same crossing. Other but less important uses of this segment include some homesteading, farming and ranching.

River segment C

River segment C, extending from the Cottonwood Bridge to the mouth of Butte Creek (approx. RM 95) has been extensively inventoried by Polk (1976). Within this particular stretch of the river Polk recorded 9 historic sites. Site types recorded include homesteads, a ferry site, irrigation canals, ranching line shacks, a still site from prohibition days and three buckboard wagons used in a 1930's movie about the Oregon Trail.

River segment B

River segment B, which extends from the mouth of Butte Creek (RM 95) to Service Creek (RM 155), was partially inventoried for cultural resources by Polk (1976). A small number of sites were located during the examination of this segment. Historically, these consisted of one 1930's era cabin.

This segment contains some interesting sites related to transportation and settlement. In the 1860's the route of The Dalles Military Road passed along the west side of this segment between Cherry and Bridge Creeks. Clarno was apparently established in the 1880's y Andrew Clarno who was a cattle rancher. A post office was erected at Clarno in 1894, although there is some evidence to suggest that an earlier one existed in the 1880's. The floodplain zone of this segment has been subjected to farming and ranching activities since this early era.

PRELIMINARY FINDING

River segment D

The occurrence of the Oregon Trail crossing along segment D has local, regional and national significance. Cultural resource inventories will need to be conducted prior to any proposed ground disturbing activities.

The Oregon Trail is considered to be a National Historic Trail and of National Register eligibility. Therefore, all historical resources along this segment are outstandingly remarkable.

River segment C

Segment C of the river contains a great variety and concentration of historic sites. Additionally, the historic sites along this segment represent a unique view of early twentieth century occupation of the canyon and can contribute to our understanding of the settlement of the region. These sites also offer excellent interpretive opportunities. Historic resources within this segment can contribute to our understanding of the part economy and scenic values of the canyon played in the local and regional histories.

River segment B

Although cultural resource inventories have been somewhat limited along segment B, the findings have been significant. The available evidence suggests that a variety of historic sites exist which could provide important information about our understanding c past lifeways. Additional inventory and evaluation will need to be performed prior to any proposed ground disturbing activities.

The historic sites can also contribute to our better understanding of the initial settlement and occupation of the region. Although they are significant, they are not outstandingly remarkable.

All Segments

Overall, the John Day River and its corridor played an important role during the pioneer migration and settlement of the west, some sites being significant enough to make them eligible for National Register designation. The colorful history of the area is ripe for interpretation and is found to have outstandingly remarkable values. This is an upgrade from the finding of "significant" noted in the Congressional Record.

OTHER SIMILAR VALUES

Assessments of additional river-related values may be completed upon receiving the results of subject expert solicitations for information and significance.

APPENDIX A

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APPENDIX B

PUBLIC INVOLVEMENT PLAN FOR RESOURCE ASSESSMENT

1. Complete internal draft of the John Day River Resource Assessment. Ongoing review and editing using interdisciplinary approach.

   Internal Interdisciplinary Review Team:
   - Don Smith, Assistant District Manager
   - Dick Cosgriffe, Area Manager
   - Brian Cunninghame, Public Affairs/Project Manager
   - Wayne Elmore, Natural Resource Specialist
   - SuZan Meiners, Recreation (review team leader)
   - Dan Wood, Outdoor Recreation Planner
   - Roy Pearl, Wilderness (NRS)
   - Brad Keller, Wildlife Biologist
   - Sarah Nichols, Student Trainee (Wildlife Biologist)
   - David Young, Fishery Biologist
   - James Eisner, Student Trainee (Fisheries)
   - Dennis Davis, Geologist
   - Ron Halvorson, Botanist (NRS)
   - John Zancanella, Archeologist

   External Professional Review:
   - Suzanne Crowley Thomas, USFS, archeology/history
   - Errol Claire, ODFW, wildlife/fish
   - Ted Frend, NPS, paleontology
   - Frank LeMay, ODFW, wildlife/fish

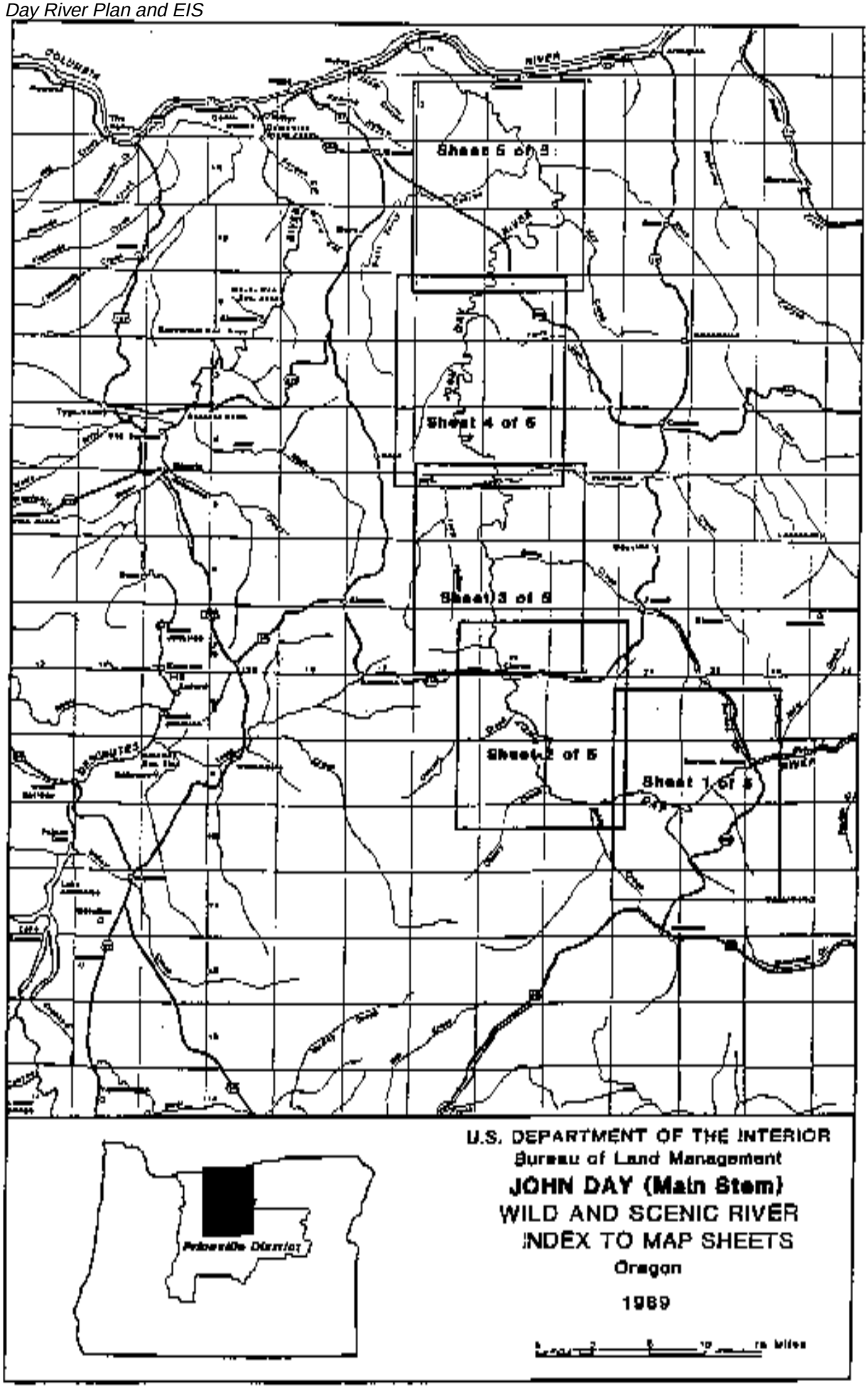
2. Complete revised internal draft and have Management Team Review.

3. Mail Resource Assessment draft to interested public and professionals for comment.

4. Revise draft based on public comment and send to State Office.

APPENDIX C

RIVER MAPS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Sheet 4 of 5
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U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
JOHN DAY (Main Stem)
WILD AND SCENIC RIVER
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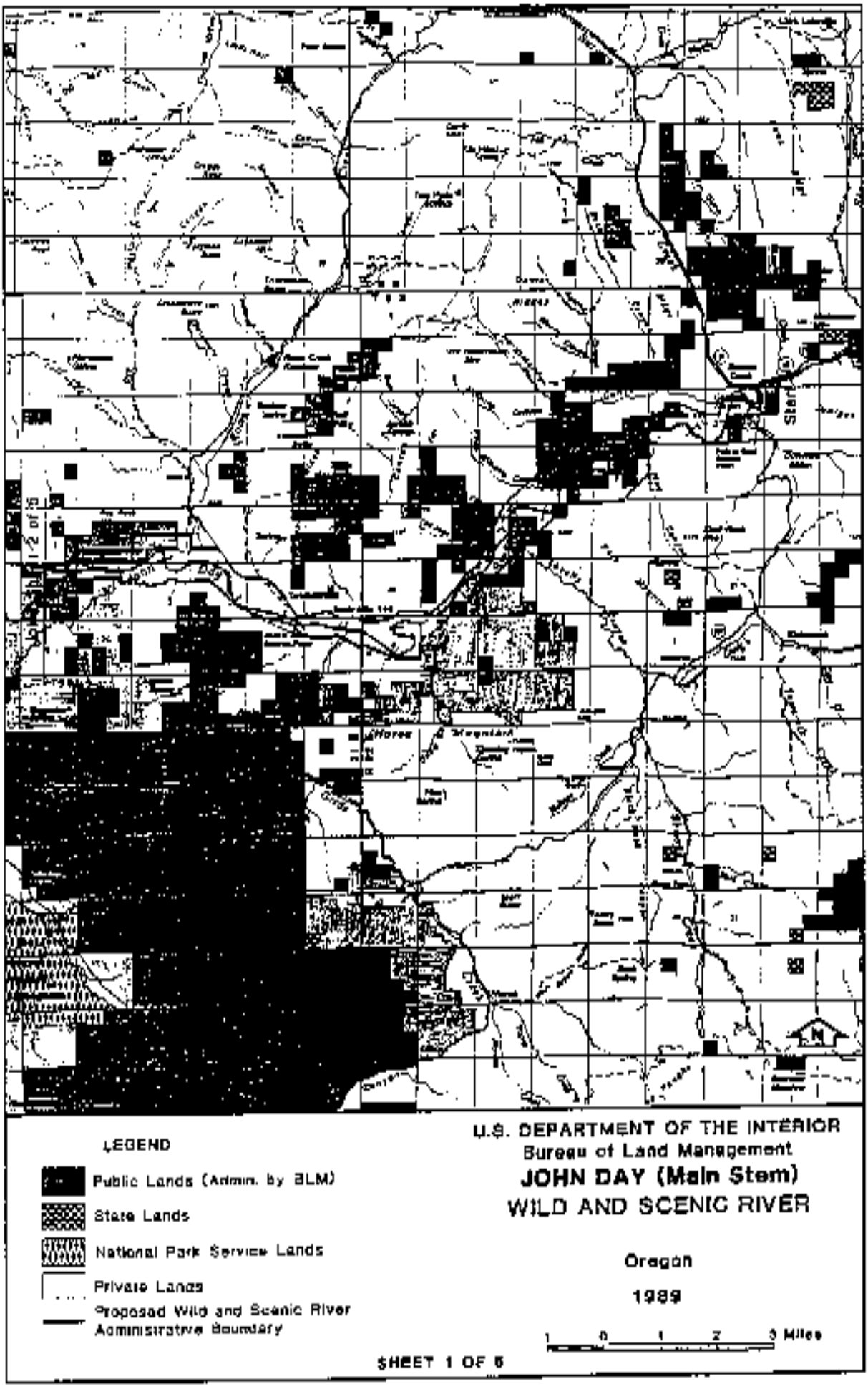
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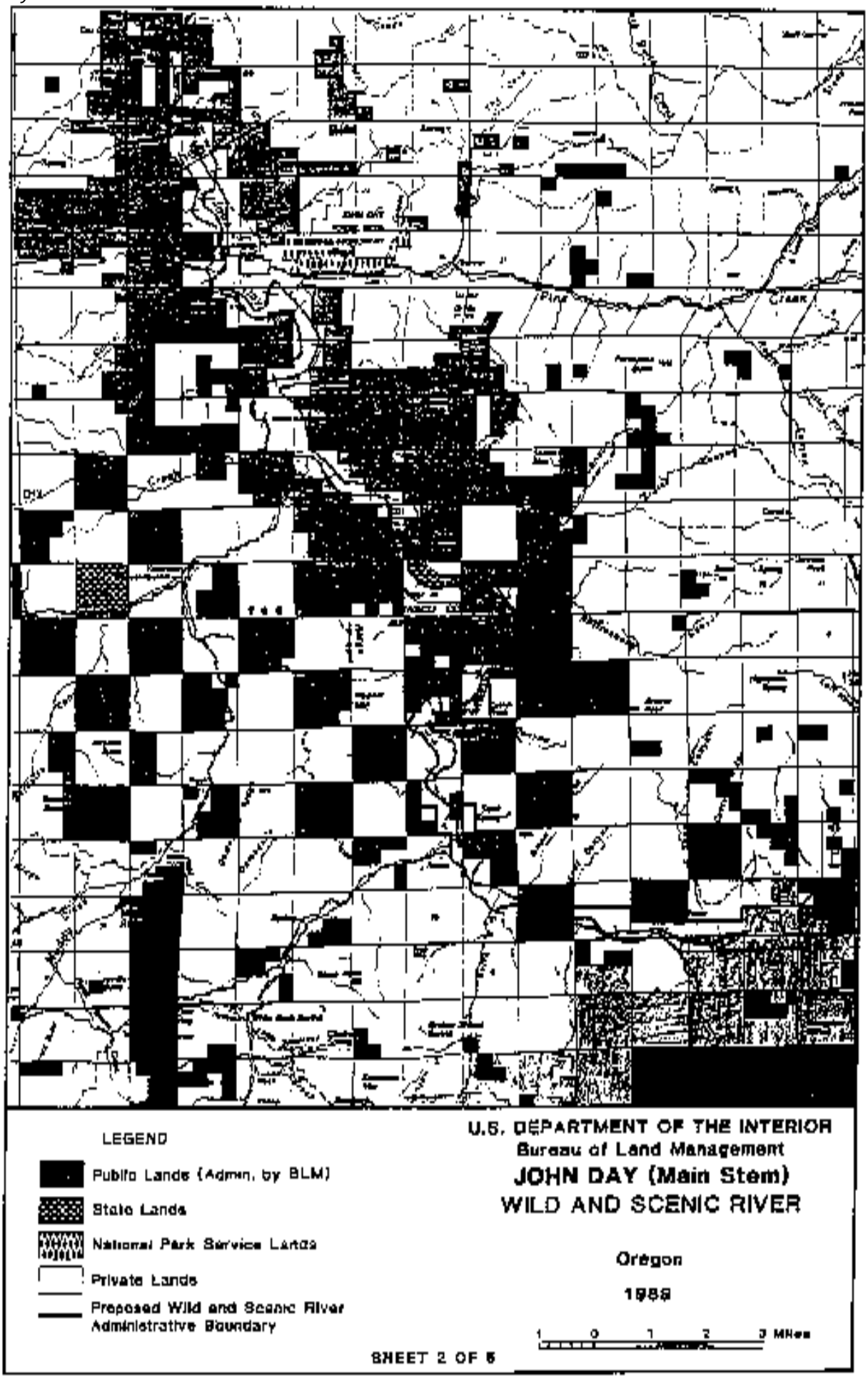
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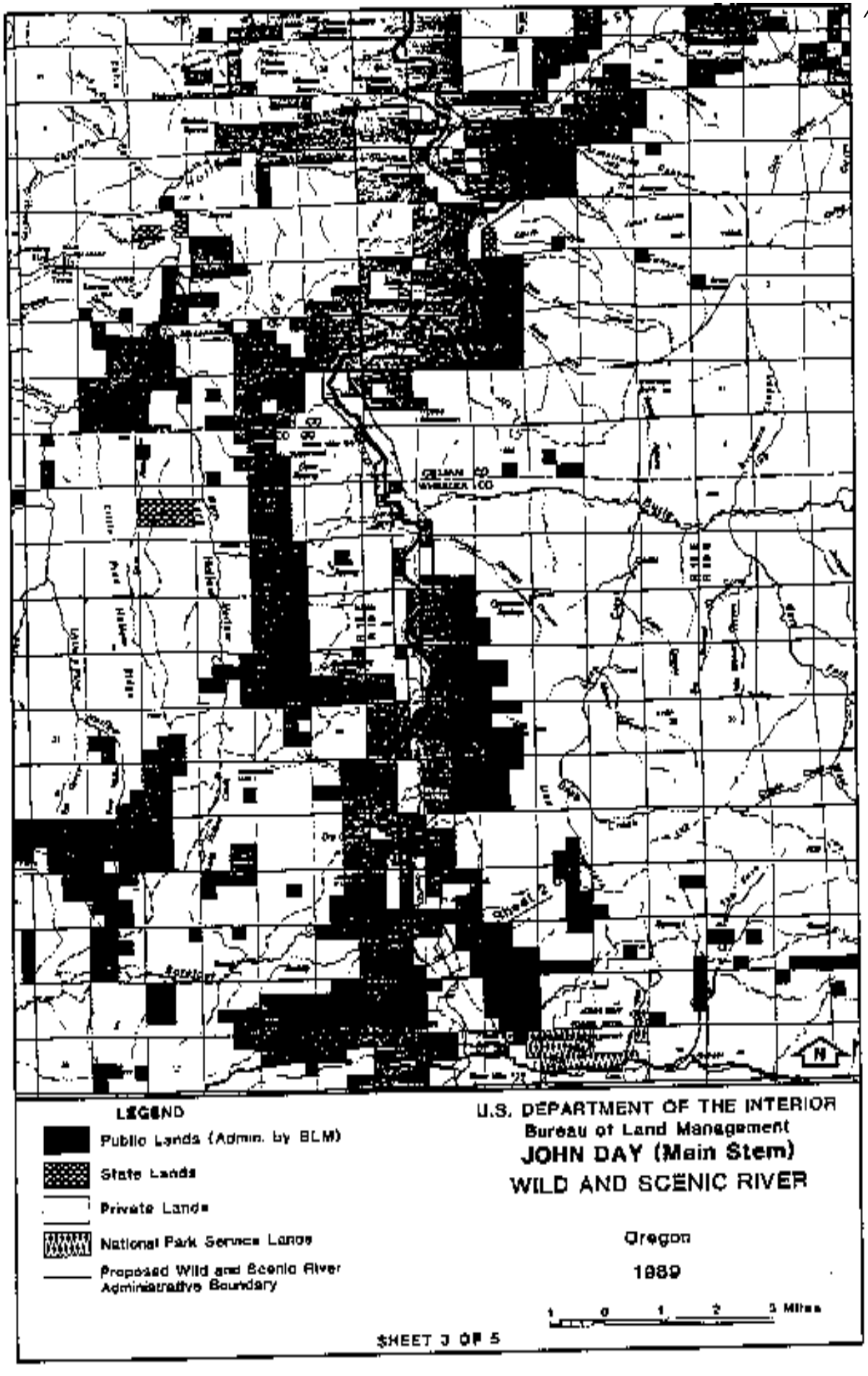
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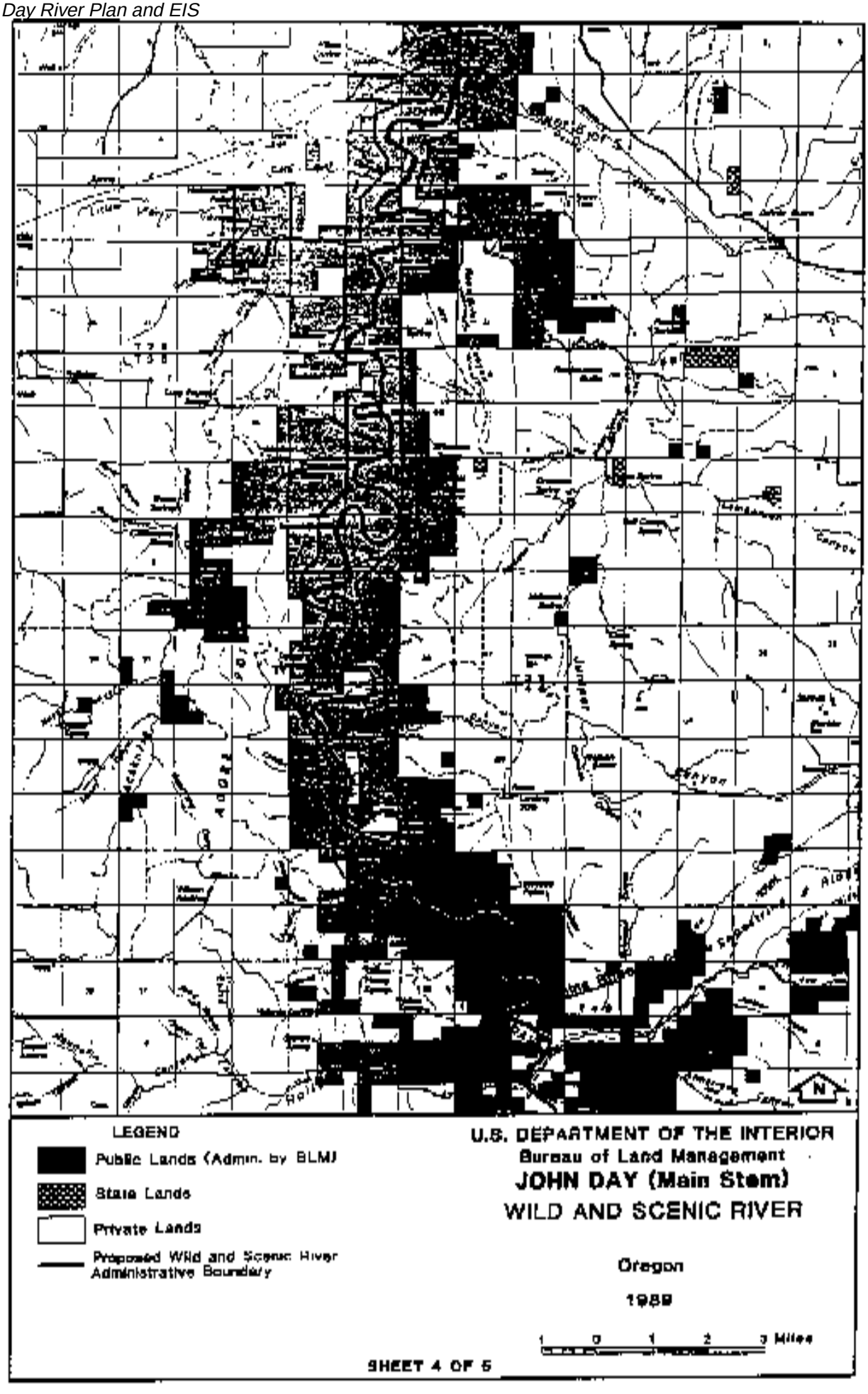
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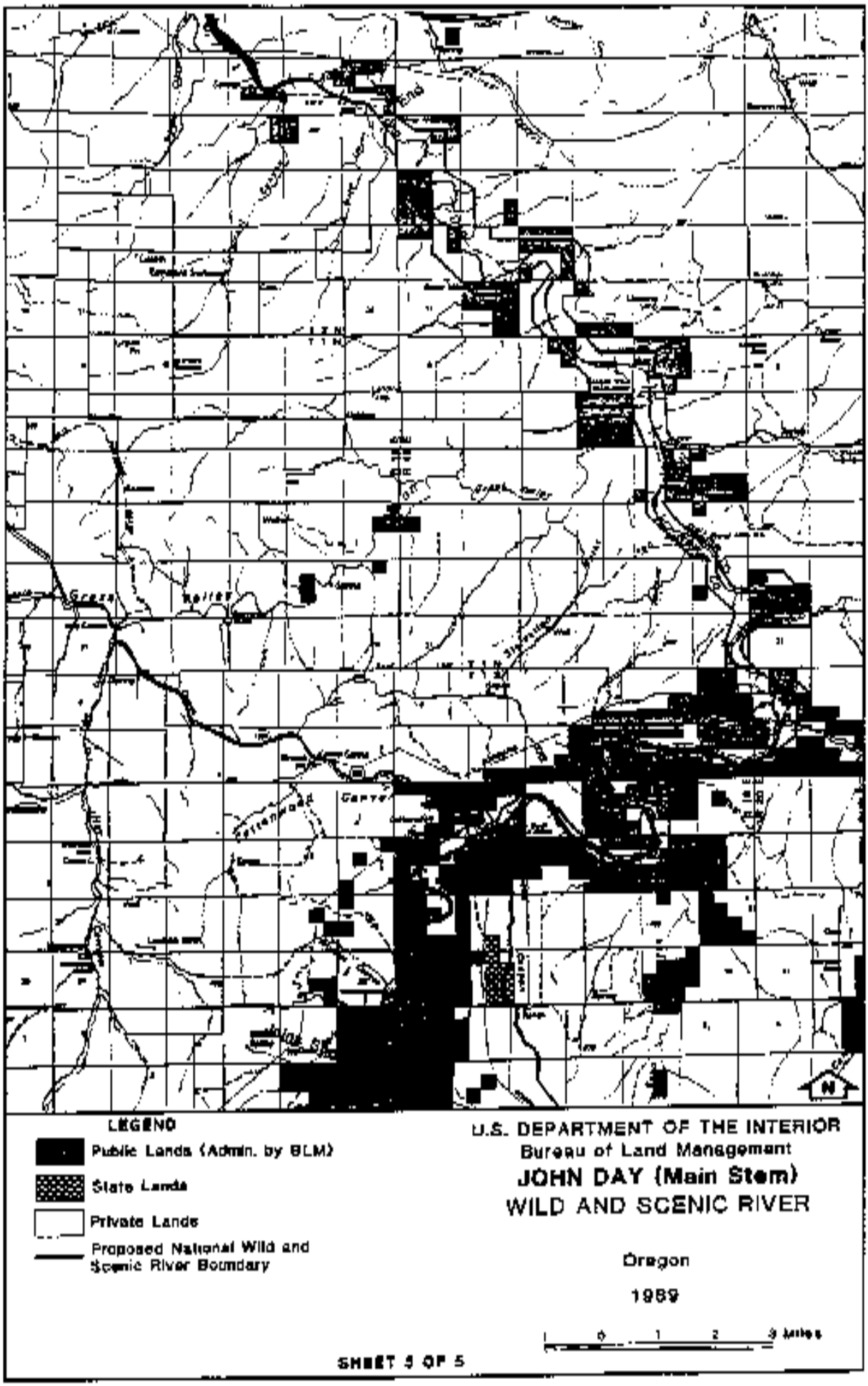
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APPENDIX D

RESOURCE ASSESSMENT PROCESS (IN DEPTH)

I. PURPOSE AND NEED

The importance of a thorough resource assessment cannot be overstated. The resource assessment serves as the foundation of the river management planning process. It determines which river-related features are truly outstandingly remarkable or contribute substantially to the river setting and the functioning of its ecosystem. It is not intended to serve as an eligibility evaluation.

Usually the initial step in the river management planning process, the resource assessment must take into consideration all features which are directly river-related. This early identification and evaluation will help ensure that significant features are not overlooked and that a holistic approach to investigating the inter-relationship among various features is achieved.

The identification and documentation of outstandingly remarkable and other significant values is a first step in developing management prescriptions that protect and enhance river values. A thorough resource assessment provides the basis upon which management decisions affecting resources within the planning area can be made during the interim period pending plan completion and approval. Additionally, the findings and conclusions reached at the end of the assessment effort will be used in management plan scoping, including specific issue identification and establishment of final administrative boundaries.

There are three components of the resource assessment process. Fist is the identification of any outstandingly remarkable values not specifically identified by Congress, but found present nevertheless, within planning area boundaries. Second is the identification and determination of significance levels for river-related values which are not determined to be outstandingly remarkable, yet contribute substantially to a river's overall character. Third is the confirmation of the outstandingly remarkable values set forth for specific rivers in the Omnibus Oregon Wild and Scenic River Act (see the Congressional Record - Senate, vol. 134, dated October 7, 1988).

It is important to remember that the term "outstandingly remarkable" as used in the Wild and Scenic Rivers Act has never been precisely defined. Consequently, any determination of outstandingly remarkable values is a matter of informed professional judgment and interpretation. The only firm expectation is that the basis for the judgment be adequately documented in the resource assessment.

II. VALUE ASSESSMENT

All values assessed should be directly river-related, or owe their existence to the river ecosystem. The rationale for a direct river relationship is that the program involves the Wild and Scenic Rivers System rather than a generalized land and resource conservation program. It is therefore appropriate to focus attention on the river and resources directly related to it.

The resources to be assessed are specifically identified in the Wild and Scenic Rivers Act (PL 90-542) and include scenic, recreation, geologic, fish and wildlife, historic, cultural, and other similar values. Other similar values include, but are not limited to, hydrologic, botanic and ecological resources.

III. SIGNIFICANCE THRESHOLDS

In order to be assessed as "outstandingly remarkable", a river-related value must be a unique, rare or exemplary feature that is significant at a regional or national level. Those river-related values that are not assessed as outstandingly remarkable but contribute substantially to the functioning of the river system and river setting should be described and their level of significance indicated.

The geographic regions (8) described in the 1980 Statewide Comprehensive Outdoor Recreation Plan (SCORP) for Oregon may be used for comparing certain river-related values among the rivers in a "region". Because of the location of rivers in specific SCORP regions to contiguous state borders (Washington, Idaho, Nevada, and California), geographic regions can be modified as necessary to provide the basis for meaningful comparative analysis for non-recreation values such as fisheries or cultural resources.

Guidelines for assessing values are meant to set minimum thresholds to establish outstandingly remarkable values and are illustrative, not all-inclusive. In some cases, a value may meet some or all of the criteria, yet may not, for a well-documented reason, be determined to be an outstandingly remarkable value. In another situation, a value may be called outstandingly remarkable for a reason not listed in these guides. The important and critical step is to document the rational for the determination.

APPENDIX E

Value Comparison Chart

Value	Congressional	This Assessment
Scenic	O	O
Recreational	O	O
Fishery	O	O
Wildlife	–	O
Geologic/Paleontologic	S	O
Botanic/Ecological	–	S
rehistory/Traditional Use	S	O
Historic/Cultural	S	O

O = Outstandingly Remarkable

S = Significant

APPENDIX F

Comments to the Draft Resource Assessment

The BLM received many comments from the public after the draft Resource Assessments were published. Some comments specifically addressed the Resource Assessment while others pertained to river planning. Only those comments specifically addressing this Resource Assessment will be included here. Comments on river planning will be addressed in the John Day River Management Plan and Environmental Impact Statement.

WILD AND SCENIC RIVERS

COMMENT FORM

nk you for your interest in these rivers. Below is a check list should you want to receive more information or provide comments. We will welcome your comments at any time throughout the planning process, however, comments for this phase of the process must be received at the BLM office by August 31, 1991 in order to be fully utilized. Several mailing lists have been combined to send you this information. If you received duplicates please share them.

X Please send me more information about the following rivers:

___ All 6 rivers
___ Lower John Day River (mainstem)
___ South Fork of the John Day River
___ Middle Deschutes/Lower Crooked Rivers
___ North Fork of the Crooked River
___ Crooked River (Chimney Rock Segment)
___ White River

FROM:
MARK EGGER, CONSERVATION
WASH. NATIVE PLANT SOCIETY
9521 - 49th AVENUE N. E.
SEATTLE, WA 98115

X I am interested in participating. Please keep me on the mailing list.

___ I am not interested in any further information. Please remove my name from the mailing list.

X I would like to share my ideas and suggestions on this form.

Please feel free to send us additional comments.

Comments:

Mainstem John Day R. also contains arguably remarkable botanical values, namely the numerous species of endemic and/or designated sensitive species of native plants found in this drainage. One example is Castilleja crantonii which is endemic to the middle John Day R. area, especially around Clarno. State of OR rare plant data base should be consulted for other rare species along this stretch of the river.

- Mark Egger

Please fold and either staple or tape this form and drop it in the mail. No postage is necessary.

October 3, 1991

To: Suzan Meiners

From: Ron Halvorson, Dist. Botanical Spec.

Subject: John Day River (mainstem) and botanical values

In answer to Mark Egger's wild and scenic river comment, the mainstem of the John Day River does possess numerous endemic plants, many of which were, at one time or another, of some important status. Among these plants are Castilleja xanthotricha (yellow-hairy Indian paintbrush), Astragalus diaphanus var. diaphanus (transparent milkvetch), Chaenactis nevii (Nevius' chaenactis), Pediocactus simpsonii var. robustior (barrel cactus), Hymenoxanthus filifolius var. filifolius (Columbia cutleaf) and Asclepias cryptoceras (pallid milkweed). The yellow-hairy Indian paintbrush was once a federal candidate for listing as T/E but now does not appear on any list I know of and is not considered a special status plant. Not only is it found near Clarno, but also in much of the Muddy Creek, Currant Creek, Cherry Creek and Bridge Creek drainages, extending from at least the North Pole Ridge area to Mitchell and south and east. Nevius' chaenactis and the transparent milkvetch were both federal candidates but now are at the "Watch" level, the lowest level a plant can have and still be recorded in the field when observations are made. The pallid milkweed and the barrel cactus are also at the "Watch" level and never were federal candidates. The Columbia cutleaf has been on the "Watch" list but has no status at this time.

I know of no plants within the corridor of the John Day Wild and Scenic River which would cause the botanical values to be "outstandingly remarkable". There are significant values, however, by the presence of the above endemic species but these endemic species occur elsewhere in similar soils, such as in the Bridge Creek/Sutton Mtn. and Spring Basin areas.

There are areas of "pristine" bunchgrass communities on the steep side hills of the W&S River corridor, but these also occur elsewhere, and so while "significant", I would have a hard time applying the term "outstandingly remarkable" to them.

The source of this information is from both records in-house and the Oregon Natural Heritage Data Base. Mark Egger's comments would perhaps have been appropriate five years ago, but the status and importance of plants is continually changing based on new information.

Ron Halvorson

Dave Kile
102 NW 7th St
John Day OR
97845

10/2/91

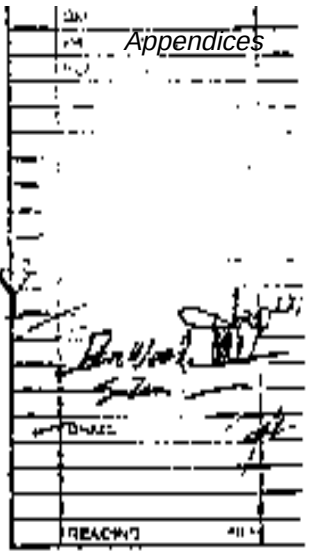
Suzan:

Thanks for the Copy of the Draft Resource Assessment for the Lower J.D. River. Your attached note asked for my phone #. It is 575-0899.

Attn: Suzan Meira

I know it is old news, but I need to Congratulate those in your Organization for Consummating the Sutton Mtn Land Exchange, and taking Aggressive measures to Stabilize the Stream banks and Slopes in that Area. If available I would appreciate any maps or additional information about your Restoration and Recreation enhancement Work. If there is a Charge for this information please Contact me — Thanks

Sincerely
Dave Kile



THE WILDERNESS SOCIETY

NORTHWEST REGION

November 25, 1991

James Kenna
Deschutes Area Manager
Bureau of Land Management
P.O Box 550
Prineville, Oregon 97754

Dear Mr. Kenna:

Thank you for the opportunity to review the draft Lower John Day Wild and Scenic River Resource Assessment. We support the "outstandingly remarkable" designation of the scenic, recreation, fishery, and wildlife resources. However, we would like to comment on several areas of concern to the Wilderness Society.

In light of the current urgency of the salmon-issue, one of our greatest concerns is the section outlining the fishery resources. The John Day River Basin is one of the last wild anadromous fish runs in the Pacific Northwest. We must do everything possible to protect and enhance this disappearing resource. Although the author has done a fine job outlining the regional importance of the river and its associated riparian habitats for both fish and wildlife, the rest of this section is plagued with deficiencies. The draft should include: current fishery populations figures, the extent of their habitats' degradation, and the impact that specific "cultural" activities have had on the fisheries. For example, how have grazing, agriculture, road-building, and fishing activities affected water quality, fish populations, and riparian habitats? To what extent can certain conditions be attributed to management activities outside the proposed scenic wildlife area? Management alternatives drafted without this information could seriously impair the future health of these regionally significant fisheries.

Considering the importance of this particular fishery, we are surprised that the recreational values section does not assess how fishing activities have affected the fish population. For example, what percentage of the population is caught each year? Is the population stressed? In addition, this section should

610 SW ALDER, SUITE 915, PORTLAND, OR 97205
(503) 248-0452

assess the impact hunting and camping have had on the riparian zones. In the future it might be necessary to develop permanent campsites that would concentrate visitors away from these ecologically vital zones. These sites would present interpretive and visitor management opportunities.

Regarding the scenic resources, we fear that the vague language and description of "cultural modifications" may confuse the extent to which these "modifications" have undermined the area's scenic potential. In particular, the last sentence on page six ("These sights are either temporary...") does not agree with the spirit of the last sentence of the previous paragraph ("In a 1983/84 survey..."). The river users from this survey would probably find their visits much more enjoyable without these "temporary or not significant enough" sights. In addition, it would be helpful to make a clearer distinction between "rural" and "wild" areas on the river. How many miles of river scenery are blemished by "cultural modifications?" What sections (using A-D, as done in the assessment of cultural values), if any, are actually pristine?

The assessment of wildlife values is one the draft's strongest sections. We applaud the emphasis on the degraded condition of the riparian zones. Healthy riparian habitats are essential to the continued health of the area's wildlife. The management plan must call for an improvement of these conditions. Therefore, a complete inventory of the degraded zones is essential so past management mistakes can be corrected. In addition, the draft would be improved by including the current status of the reintroduced bighorn and by defining the impacts of "non-utilitarian recreational pursuits." We also agree with the preliminary finding that the bat population data is inadequate.

The botanical section is not nearly as complete as it should be. Although the draft indicates that the area contains sixteen "special status species," including three potentially endangered or threatened plants, only one species is named. Considering the degraded conditions of the riparian zones, the planners must know what is there, or rather, what is left. A complete inventory is absolutely necessary. The presence of three potentially endangered or threatened plants certainly qualifies these botanical values as "outstandingly remarkable." We hope that an interest in continuing current grazing practices did not prejudice your assessment of botanical resources. The evasive language in the botanical section suggests a fear that a "outstandingly remarkable" designation would force drastic changes in range management.

In general, this draft teases the public with obscure suggestions that past and current grazing management plans have damaged the area. The impacts of these practices should be known to assure they are not continued or repeated. We suggest suspending grazing activities at least until the corridor has recovered from years of, what has obviously been, extremely destructive grazing.

The planners must not give in to pressure to accommodate short-term grazing demands that currently damage the area's riparian zones. This assessment and planning process is designed to develop a plan "which protects and enhances.. ..river-related values." We urge you to examine the "significant" designation of botanical values and seriously question current grazing management.

Again, thank you for the opportunity to comment on the Resource Assessment draft. In general the draft is an admirable first step towards a final resource assessment and the protection and enhancement of this river's "outstandingly remarkable" values, but it does need some revision. We hope our comments will facilitate this process. We look forward to working with you in the management plan development process.

Sincerely,

Robert M. Freimark
Assistant Director

C. Bayard Smith
Wild and Scenic Rivers Volunteer

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Prineville District Office
P.O. Box 550 (185 E. 4th Street)
Prineville, Oregon 97754

Su
FYI

IN REPLY REFER TO:
6671

JAN 10 1992

Errol Claire
John Day District
Oregon Department of Fish and Wildlife
P. O. Box 9
John Day, OR 97845

Dear Errol:

I have received many comments on the Resource Assessment of the John Day River. Some of the comments require additional fish expertise that you have. Would you help me answer the following questions:

1. Why are chinook absent from the South Fork Basin?

2. What is the hatchery supplementation policy for the John Day River? What current supplementation actions are going on?

3. What are the interactions between hatchery fish and wild stock in the John Day River, in terms of competition, productivity and disease?

4. Please assess the impact of the present sport catch of fish on redband, steelhead and chinook.

5. What riparian restoration efforts are being made on State owned land in the John Day Basin?

Errol, thanks again for your help. Would you be able to respond by February 15, 1992? Let me know.

Sincerely,

David K. Young
District Fishery Biologist

January 10, 1992

MEMORANDUM

To: SuZan Meiners, Rec. Planner

From: Lyle Andrews, Range Con.

Subject: Comments on John Day River Resource Assessment and Wilderness Society Letter (see attachments)

Attached are my only comments on the JDR Resource Assessment. Because of the scope of assessment I did not see a big need to expand on references to livestock grazing and management or lack there of. It probably suffice to say that certain resource values can be enhanced by improved range management.

Concerning the Wilderness Society's letter dated 11/25/91, which contains comments on the draft JDR Resource Assessment, I would simply say that it is not the intent of a resource assessment to analyze why and how certain resources may have gotten in a degraded condition, but only that they are and that they may be improved. Also, the river management plan will detail exactly how these degraded resources will be improved.

PRELIMINARY FINDING

As found by Congress, the scenic resource of the John Day River is determined to be an outstandingly remarkable value. The rural and wild settings and unique features along the river attract visitors on a regional and occasionally national and international basis. The opportunity exists to enhance the scenic values along some segments of the river by adopting range management techniques designed to ~~restore~~ the riparian zone and river banks ~~and to reduce noxious weed competition with bunchgrasses and other native vegetation.~~

RECREATIONAL VALUES

Criteria for Outstandingly Remarkable Rating

Recreational opportunities are, or have the potential to be, unique enough to attract visitors from outside of the geographic region. Visitors would be willing to t ional purposes. Ri to, sightseeing, , and boating.

Interpretive potential t

The river m ional or regional

DISCUSSION (

Considerabl iver. Hunting, fi (recreation photography s time, visitors as there is little or no recreational related development along the river except for two pit toilets at Clarno and Cottonwood highway bridges.

The geological formations of the basin offer opportunities for scenic viewing and fossil hunting. The John Day Fossil Beds National Monument, and other areas in the vicinity, contain outstanding fossils of international significance. These fossils are protected under the Antiquities Act therefore collection is not permitted.

Hunting seasons run from September through mid-January for waterfowl/upland birds and from October through November for the various deer seasons, accounting for an approximate total of 18,000 visitor use days. Superior bass and steelhead fishing attract anglers to total approximately 10,000 visitor use days annually.

7

Immediately adjacent to the river, the riparian zone offers lush, green vegetation important to wildlife and natural hydrologic processes. Although past use has not been kind to this important vegetation, improved grazing management promises a slow, but steady recovery. In contrast to the cool, inviting riparian areas, the adjacent canyon slopes offer little hope of relief to the traveler. These dry, steep, rocky hillsides, protected from unregulated grazing and agriculture by their topography and inaccessibility, contain the remnants of a once-great grassland. Dominated by vast acreage of bluebunch wheatgrass (Agropyron spicatum), these slopes appear much as they did hundreds of years ago.

Volcanic clays of varying hues and textures bear testimony to the fiery birth of much of the landscape along the river. Here, in these clay soils, are several species of plants endemic (of limited range, only found here) to this part of Oregon. Early spring moisture often causes these otherwise barren clay slopes to be ablaze in a carpet of yellow wildflowers. An assortment of unique plants on the rocky ridges tempt one to hike to the top. All in all, 16 plants of some degree of importance a "special status species" are known or suspected in the river corridor, including three candidates for listing as endangered or threatened.

The designated area contains vegetation representative of a potential natural community (PNC) bluebunch wheatgrass ecosystem. (PNC is the relatively stable, final stage in the succession of vegetation types, generally equated with pristine). There are opportunities to study native range sites which could be useful for vegetative comparison and could be maintained as pristine plant reserves. This could be beneficial for future genetic experiments.

PRELIMINARY FINDING

The John Day Wild and Scenic River corridor contains a relatively pristine bluebunch wheatgrass plant community coupled with the presence or potential presence of 16 special status plant species. In addition, the unique contrast between riparian and high-desert upland vegetation provides important wildlife habitat and aesthetic values to the area. There is opportunity to improve the qualities of the John Day River's vegetative community through range management. Scientific study and interpretive opportunities also exist in the area. Therefore, these botanical and ecological values are found to be of significant value.

PRE-HISTORIC, CULTURAL VALUES

Some of the John Day River corridor has been surveyed for cultural resources. Nearly
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South Fork of the John Day

Wild and Scenic River
Resource Assessment

June 1991

Bureau of Land Mangement
Prineville District

TABLE OF CONTENTS

I. INTRODUCTION

In 1968, Congress enacted the National Wild and Scenic Rivers Act and, for the first time, established a system for preserving outstanding free-flowing rivers. The South Fork of the John Day River was added to this system in 1988 when it was designated as a Federal Wild and Scenic River by the Omnibus Oregon Wild and Scenic Rivers Act of 1988. As defined by the Act, a National Wild and Scenic River must be free-flowing and have at least one outstandingly remarkable value. The "Outstandingly Remarkable Values" of the South Fork of the John Day River identified by Congress in the Congressional Record include: scenery and recreational opportunities. Fisheries, wildlife, paleontological, and cultural values were other significant attributes identified in the legislature though not classified as "Outstandingly Remarkable Values".

The river section from the Izee-Paulina Road crossing to the north boundary of Murderer's Creek Wildlife Area was included in the Oregon Scenic Waterways Act established by the additional water initiative in 1988. The Oregon State Scenic Waterways System includes free-flowing waterways considered to possess one or more "outstanding scenic, fish, wildlife, geological, botanic, historic, archaeologic, and outdoor recreation values of present and future benefit to the public" (ORS 390.805). For each scenic waterway, Oregon State Parks and Recreation considered "special attributes" and are, therefore, subject to rules and recommendations for protection or enhancement of these attributes. To date, special attributes of the South Fork of the John Day River have not been identified.

Under the Wild and Scenic Rivers Act, the BLM is required to prepare a comprehensive river plan to provide for the protection of the river values. This plan, of which the resource assessment is the start, will use the Limits of Acceptable Change (LAC) planning process while at the same time comply with the National Environmental Policy Act (NEPA) planning regulations. The planning steps include identification of issues, concerns and opportunities associated with activities along the John Day River which will then be translated to management objectives and measurement criteria for meeting the objectives. From this, a range of management alternatives are developed, evaluated, and the preferred alternative chosen. The preferred alternative becomes the more detailed river management plan and includes provisions to monitor the effectiveness of management in meeting the objectives of the plan. Through each phase of the planning process, public involvement will be invited, and will be essential for the success of a sound management plan. (See Appendix B for the public involvement plan.)

I. RESOURCE ASSESSMENT PROCESS OVERVIEW

To become a component of the National Wild and Scenic Rivers System, a river must be "free-flowing" in that it can not have any major impoundments or diversions along its course. The river must also possess one or more "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar value". The purpose of this document is to determine and define what those "outstandingly remarkable" values are and how they relate to the river.

In designating the South Fork of the John Day River as Wild and Scenic, Congress mandated the preparation of a management plan for the river. The importance of a thorough resource assessment (RA) cannot be overstated. The RA serves as the foundation of the river management planning process. It determines which river-related features or attributes are truly outstandingly remarkable and which values contribute substantially to the river setting and the functioning of its ecosystem. This assessment will guide interim management, provide the basis for developing a joint federal and state river management plan and assist in the determination of Federal Wild and Scenic River boundaries.

The RA process is used to determine the degree of significance of river-related values. The decisions are based on available data and informed professional judgement. The RA process was developed by government agencies with input from knowledgeable organizations and individuals. The process provides a degree of standardization and consistency on Wild and Scenic River planning throughout the northwest. It is an objective process accomplished through the use of an interdisciplinary team knowledgeable of the National Wild and Scenic Rivers program, the particular resource values to be considered and the river or area to be studied. Information from other experts is obtained though consultation, document review and/or direct involvement as needed. An analysis is conducted to compare resource values with other rivers within a particular physiographic or demographic region. As a basis for comparison, geographic regions defined in Oregon's Statewide Comprehensive Outdoor Recreation Plan (SCORP) are partially used (see map on page 6).

The South Fork of the John Day Wild and Scenic River is located in SCORP Region #1Z, incorporating Morrow, Umatilla, Union, Wallowa, Grant, and Baker Counties. The region is flanked by the Snake River on the east with the Columbia River and Oregon-Washington border forming its northern boundary. This region also contains designated portions of the North Fork of the John Day, North Powder, Powder, Malheur, Minam, Lostine, Eagle Creek, Grande Ronde, Wenaha, Snake, Imnana, and Joseph Creek Wild and Scenic Rivers. (For additional discussion of the resource assessment process, see Appendix D). Essentially, the resource assessment process should answer the questions "What is special about the South Fork of the John Day Wild and Scenic River and what additional information is needed to develop a management plan for the river and properly manage and protect those values?"

The following steps or verification techniques were used to evaluate the contribution of various resource values to the South Fork of the John Day River:

- The use of an interdisciplinary team approach;
- Consideration of uniqueness and rarity at a regional and national level;
- Consideration of values identified in previous studies and reports (see Appendix A);
- Values must be river related in that they owe their existence or contribute to the functioning of the river system and its immediate environs;
- The use of standardized criteria against which river values were measured to determine outstandingly remarkable value;
- Verification by other experts in the subject area;
- Public verification of preliminary findings of outstandingly remarkable value.

This resource assessment will evaluate the following South Fork of the John Day River resources:

+ Scenic
+ Recreational
+ Fish and Wildlife
+ Historic/Cultural
+ Botanic/Ecological
+ Geologic/Paleontologic
+ Pre-historic/Traditional Use
+ And other similar values

Value Comparison Chart

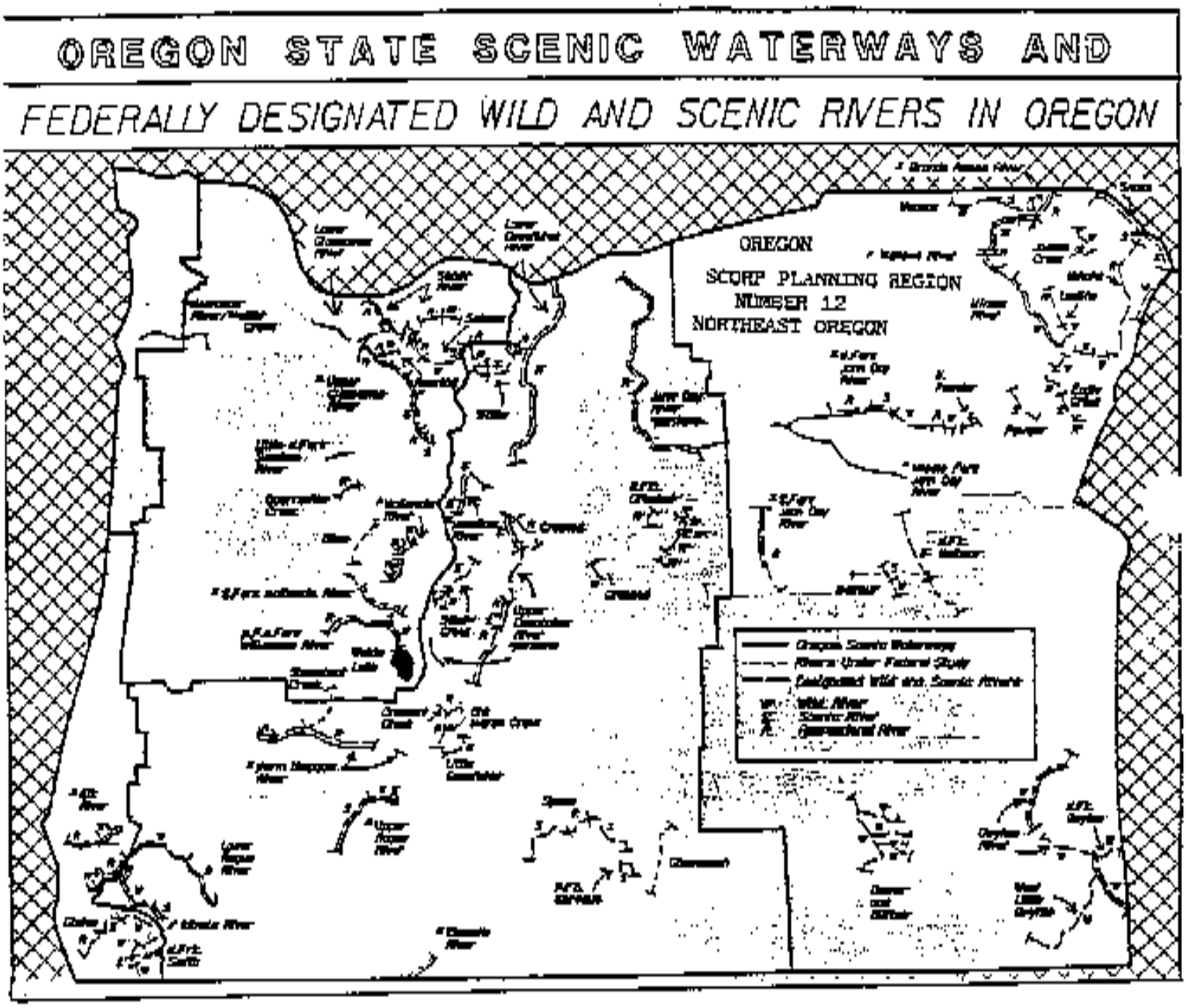
Value	Congressional	This Assessment
Scenic	O	O
Recreational	O	O
Fishery	-	O
Wildlife	S	O
Geologic	-	S
Paleontologic	-	O
Botanical	-	O
Prehistoric/Traditional Use	-	(S?)
Historic/Cultural	-	(S?)

O = Outstandingly Remarkable

S = Significant

? = Need More Information To Determine

1989
State Comprehensive Outdoor Recreation Plan
Region Map



III. RIVER DESCRIPTION

The South Fork of the John Day River is situated primarily in a semi-arid area in northeastern Oregon. Flowing northward from the Ochoco and Aldrich Mountains, the entire South Fork drains an area of approximately 607 square miles and enters the mainstem John Day at Dayville, the only incorporated city in the subbasin. Subbasin elevation ranges between about 2,300 feet to 7,400 feet above sea level. Most of the subbasin is located in Grant County.

The Act designated the 47 mile segment from the Malheur National Forest boundary to Smokey Creek as a recreational river. The entire Wild and Scenic portion of the South Fork is administered by the Bureau of Land Management through interagency cooperation with other federal, state, and local government agencies. Boundaries and acreages identified in this report are subject to revision based on further analysis of existing and new information in the preparation of specific river management plans.

Land Ownership Within the South Fork of the John Day Wild and Scenic River Preliminary Boundaries:

	Approximate Miles of River Frontage	Approximate Acreage
BLM	30	8,720
State	8	1,310
Private	56	4,810
Ochoco NF	1	160
Total	47 x 2 = 94	15,000

The 29 mile segment between the Post-Paulina Road crossing to the north boundary of Murderer's Creek Wildlife Area was designated a scenic waterway by the State of Oregon in 1988. State Scenic Waterway boundaries are located one quarter mile from the mean high water line on both sides of the river. The entire length of the State Scenic Waterway lies within the federal Wild and Scenic River stretch, though in some cases the State's quarter mile boundary on both sides of the river may exceed the proposed federal boundary.

Portions of Aldrich Mountain Wilderness Study Area (WSA) are included within the proposed Wild and Scenic River boundaries for a total of approximately 2.5 miles. This WSA additionally borders approximately 1 mile of the preliminary Wild and Scenic boundary. The Wild and Scenic preliminary boundaries also overlap approximately 160 acres for a total of approximately one and a half river miles of the Black Canyon Wilderness managed by the USFS. A 50 mile National Back Country Byway follows the South Fork from Dayville to the border of the Malheur National Forest. Within the South Fork of the John Day area there are approximately 20 acres of commercial forestland classified as Fragile Restricted and approximately 100 acres classified as withdrawn.

A proposed addition to the State Recreation Trails System would pass through the designated portion on an east-west route near the Murderer's Creek drainage. Murderer's Creek Wild Horse Herd Management Area, administered jointly by the United States Forest Service (USFS) and the BLM, is adjacent to a portion of the river and consists of 143,000 acres. In addition, the 26,000-acre Murderer's Creek Wildlife Management Area neighbors a portion of the river and is a cooperative federal, state and private effort managed by the Oregon Department of Fish and Wildlife.

The South Fork near Dayville was gaged intermittently for 10 years between 1910 and 1930. A gauge was reinstalled just above Dayville in October of 1987 and is currently in service. Average annual discharge at the mouth is an estimated 100,000 acre-feet. Subbasin discharge is greatest during the winter months, the peak flow generally occurring in late April. Flows bottom out in September, the low flow period occurring from July through October when demands for irrigation use, fisheries maintenance, and water quality are greatest.

The major landcover type is rangeland with some coniferous forest edging along the river. The few agricultural areas near the designated river occur around Dayville and Izee. There is presently nonrecreational development on the designated portion of the river. A mostly gravel or dirt road follows the river's entire length, ranging from 50 feet to a quarter mile from the river's edge.

On an annual basis, the subbasin exhibits satisfactory chemical, physical, and biological quality. Problems such as sediment loading during high flow and high water temperatures during low flow periods are due to timber removal, road constructing practices, dredge & fill activities, and natural conditions (ODWR 1986).

IV. DESCRIPTION AND EVALUATION OF RESOURCE VALUES

SCENIC VALUES

Criteria for Outstandingly Remarkable Rating

The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions within the geographic region. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed may be considered. Scenery and visual attractions may be highly diverse over the majority of the river in the geographic region.

DISCUSSION OF SCENIC VALUES

The South Fork of the John Day River contains striking and unique scenic values with a wide variety of vegetation, color, and interesting landforms. Scattered ponderosa pine and an occasional Douglas or white fir intermix with juniper, sagebrush, and native bunchgrasses creating a distinct vegetative pattern on the steep canyon slopes. Lined with a flourishing assortment of streamside vegetation, the river's edge makes a picturesque centerpiece to the rugged canyon scene. In the upper reaches of the river, relatively level agricultural land forms a more pastoral setting.

The canyon is geologically scenic as well. Exposures of columnar jointing and feeder dikes are very impressive at places along the river, particularly between Smokey and Oliver Creeks and in the gorge near Black Canyon Creek.

The river itself is petite yet turbulent with numerous small rapids interrupted by occasional deep holes and a 55 vertical foot drop at Izee Falls. A number of deep drainages and tributaries, also lush with riparian vegetation, intersect the river as it flows downstream. Large basalt outcrops protrude from the ravine walls.

A gravel, county road follows the first ten miles of the river south from Dayville. From this point 12 miles south to Izee Falls, the road is seasonally maintained by the BLM and can often be rough, or even impassible during the winter. The remainder of the designated portion of the river is followed by a county road, 12 miles of which are paved.

The river corridor is mostly natural in character despite the road. Other cultural modifications to the landscape are mostly a product of ranching and recreation and include such things as 6 small ranch houses, barns, fences, spring developments, livestock, irrigation pumps, temporary fire-rings of a primitive nature, and a historic mill. These sights are in keeping with the river's recreational classification and are insignificant enough not to seriously affect the scenic values of the designated section.

PRELIMINARY FINDING

As asserted by Congress, the South Fork of the John Day River has unique and outstanding scenic value and this value is therefore determined to be outstandingly remarkable. The exceptional visual features of basalt outcrops, steep canyon walls, a waterfall, and colorfully diverse riparian, grassland and wooded vegetation combine to create an attractive, natural setting unique among rivers in the geographic region.

RECREATIONAL VALUES

Criteria for Outstandingly Remarkable Rating

Recreational opportunities are, or have the potential to be unique enough to attract visitors from outside the geographic region. Visitors would be willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but not be limited to, sightseeing, wildlife observation, photography, hiking, fishing, hunting, and boating.

Interpretive opportunities may be exceptional and attract or have the potential to attract visitors from outside the geographic region.

The river may provide or have the potential to provide settings for national or regional usage or competitive events.

DISCUSSION OF RECREATIONAL VALUES

The South Fork of the John Day River offers the visitor excellent opportunities for sightseeing, camping, fishing, swimming, picnicking, and hunting. Other forms of dispersed recreation such as photography and wildlife watching can also be enjoyed by visitors. At this time, there are no recreational developments along the river. The river's rustic character provides the visitor with a feeling of isolation and remoteness despite its roaded accessibility. This area is heavily used during hunting and fishing seasons partially due to this rustic and accessible nature.

The rugged geologic formations of the canyon offer excellent sightseeing opportunities. The John Day Fossil Beds National Monument, and other areas in the vicinity, contain outstanding fossils of international significance. Collection of these fossils on public lands is not permitted, having protection under the Antiquities Act, but visitors can still enjoy the experience of hunting for and viewing these glimpses of the past.

There are estimated to be approximately 3,000 visitor days[1] annually of use

[1]One visitor use day equals one person visiting the river for a 12-hour period.

uring trout season and an additional 1,500 visitor days of use during the fall hunting season. Fishing peaks in June with another substantial surge during early fall. Approximately 500 visitor use days annually have been recorded during the hot summer months when general camping occurs with the associated activities of hiking, sightseeing and swimming. There is no documented recreational boating use on the South Fork. Wild and Scenic designation along with the establishment of the National Back Country Byway will likely increase levels of visitor use by an additional 2-5% above the existing trend of a 2-5% increase per year.

Surveys conducted by the BLM of the entire John Day River Basin during the heavy river use months (April to June) from 1988 to 1988 found that 78% of the visitors came from Oregon, 35% of that figure being from the Central and Eastern portions of the state while 63% hailed from west of the Cascades. The other 2% were from Southwestern Oregon.

Of those who were not from Oregon, most were found to be from neighboring states, Washington being the most frequently mentioned. An ODF&W survey of anglers during November through March of 1987/88 revealed a much higher percentage of visitors from the John Day River Basin and nearby region with only 3% of the anglers being from out of state. International visitors probably make up at least part of both out of state figures.

PRELIMINARY FINDING

The South Fork of the John Day River has high value for a myriad of dispersed recreational opportunities as alluded to by Congress and therefore recreational values on this river can be considered outstandingly remarkable. Excellent opportunities for recreation on the South Fork include hunting, fishing, camping, sightseeing, wildlife observation, photography, and hiking. The combination of accessibility and rustic character provide a recreational setting that is becoming more and more uncommon in today's world and hence has potential to attract visitors from outside the geographic region.

The John Day Fossil Beds National Monument provides interpretive services in the region but there are many other rich interpretive opportunities yet to be tapped that have potential to attract visitors from outside the geographic region as well. This interpretive potential is especially evident in the fact that a Wildlife Management Area, Wild Horse Herd Management Area, Wilderness Study Area, wilderness, National Backcountry Byway, and proposed State Recreation Trail System are either within or neighbor the Wild and Scenic corridor (see River Description section of this report).

FISHERY VALUES

Criteria for Outstandingly Remarkable Rating

Fish values may be judged on the relative merits of either fish populations or habitat, or a combination of these river-related conditions.

Populations The river is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or threatened and endangered species.

Habitat The river provides exceptionally high quality habitat for fish species indigenous to the region. Of particular significance is habitat for wild stocks and/or federally listed or candidate threatened and endangered species.

DISCUSSION OF FISHERY VALUES

The John Day River Basin contains one of the few remaining totally wild anadromous fish runs without hatchery supplementation in the Pacific Northwest with current ranges of 15,000 - 35,000 steelhead and 2,000 - 5,000 Chinook salmon returning to the Basin each year to spawn (1990 figures). The summer steelhead and spring Chinook returning to the John Day and tributaries make up the largest entirely wild run in the mid-and-upper Columbia River Basin, making the river system of regional significance. Historically, Chinook are not found in the South Fork of the John Day River due to warm water temperatures, lack of pool habitat, and low stream flows. Old, sketchy, unconfirmed reports suggest that some chinook may have been in the South Fork but there have been no substantiated reports. (ODFW 1992).

The South Fork Subbasin currently produces approximately 4% - 7% of the total John Day steelhead populations as well as a substantial resident trout fishery (1988 figures). Annually, between March and June, as many as 1,000 - 2,000 adult steelhead spawners migrate into the South Fork drainage, where approximately 85 miles of spawning and rear habitat exist. Steelhead spawning is presently restricted to habitat below Izee Falls, approximately rivermile 29 on the South Fork River. A fish passage proposed by the Oregon Fish and Wildlife Commission around this natural blockage would open up an additional 81 miles of spawning habitat.

Resident trout populations inhabit 40 miles of the river and generate 3,000 to 5,000 recreation days annually with a sport catch of over 10,000 fish according to the Oregon Water Resources Department. Studies by ODFW (1992) indicate that over 90% of this catch was hatchery rainbow trout. ODFW stocks rainbow trout in the lower reaches of mainstream rivers including the South Fork (1992). The department has downsized and altered it's trout stocking program to reduce competition, harvest, and disease impacts on wild fish. Today it's goal is to buffer the key wild stock production areas by using a few hatchery fish to distribute anglers away from key wild production tributaries (ODFW 1992). This practice is augmented by planting fall spawning stock to reduce hybridization. Wild rainbows are supplemented each year with the stocking of fingerling rainbows. The native rainbow, known as redbands, were recently put on the statewide sensitive species list for Oregon. Other game species include mountain white fish. Non game species include sucker, dace, chiselmouth chub, and northern squawfish.

The fact that the John Day river system as a whole is the longest free flowing river in the Columbia River Basin significantly influences the success of the wild fish runs. In a recent Nation-wide Rivers Inventory report, the John Day was found to be one of only 42 high quality rivers left that is greater than 200 kilometers in length without any major dams.

During the summer of 1992, BLM will conduct habitat inventory, write quality and quanti and water temperature studies. Results are pending analysis.

The cumulative impact of all irrigation withdrawals is a loss of juvenile fish and their habitat during the summer. An unknown number of fish are affected. Past logging activities and road construction have increased the amount of sediment which has reduced fish habitat.

Based on the available archaeological and ethno-historic information, a variety of fishery resources were exploited within the John Day River Basin most recently by groups belonging to the Confederated Tribes of the Warm Springs and Umatilla. Treaties signed by both groups in the 1850's with the U.S. government provide for fishing rights "in the streams running through and bordering said reservation(s)... and at all other usual and accustomed stations in common with citizens of the United States..." Data on the current use of the river by these Native American groups is non-existent, but formal queries may reveal that fishing activities are occurring.

PRELIMINARY FINDING

The regional and national significance of the entire John Day Basin's fisheries qualify this resource as an outstandingly remarkable value. The quality, quantity, aesthetic, and traditional importance of the fish habitat and its resulting resident and anadromous fish populations of the South Fork serve to enrich the value of this resource.

Since the early 1970s, intensive efforts have been made to restore the riparian system along the South Fork of the John Day. This recovery effort led to significant improvements in water quality and increased benefits to the fishery.

Restoration has been accomplished by following a grazing management program that allows livestock grazing to occur during the spring. As a result, there has been vast improvement in the riparian habitat.

WILDLIFE VALUES

Criteria for Outstandingly Remarkable

Wildlife values may be judged on the relative merits of either wildlife populations or habitat - or a combination of these conditions.

Populations The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique or populations of federally listed or candidate threatened and endangered species. Diversity of species is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

Habitat The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, or may provide unique habitat or a critical link in habitat conditions for federally listed or candidate threatened and endangered species. Contiguous habitat conditions are such that the biological needs of the species are met. Diversity of habitat is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

DISCUSSION OF WILDLIFE VALUES

The collective John Day River Basin contains an outstandingly remarkable diversity of wildlife species, possibly more diverse than any other river system in the state of Oregon. The South Fork of the John Day exemplifies this quality with the diversity of habitat types it contains. Vegetation types in the river include big sagebrush, western juniper, ponderosa pine, and grand fir. A combination of grassy meadows and hillsides, streamside shrubs and vegetation, and old growth coniferous stands provide the potential for a wide variety of wild species within the river corridor. Habitat diversity is directly proportional to animal diversity, providing an abundance of edge and leading to habitat stability. The riparian zone is also of prime importance in this scheme. The riparian vegetation provides important sources of cover and food for wildlife, to a much greater extent than the surrounding dry areas.

The South Fork is important to several threatened and sensitive species. Bald eagles, threatened status in Oregon, occur along the entire river segment in winter. Historically, peregrine falcons migrated through the area; however, none have been sighted recently. Peregrines may return but only when populations throughout the region increase. A remnant sagegrouse population, a Federal Category 2 Candidate species, occurs within the basin. Historic population levels are unknown. Stands of ponderosa pine within the Wild and Scenic Corridor provide nesting and feeding habitat for Lewis' woodpeckers. Lewis' woodpeckers are listed as sensitive on the Oregon Natural Heritage Program list(1991). Other species on the list which potentially occur in the area are: white-headed woodpecker, blackbacked woodpecker, pigmy nuthatch, Northern sawwhet owl, northern pygmy owl, Flammulated owl, western bluebird, Northern goshawk, and spotted frog. Bank swallow are also on the list and definitely do occur within the river corridor.

California bighorn sheep, a category 2 Federal Candidate species, were first released in 1978 by the Oregon Department of Fish and Wildlife at Aldrich Mountain. The sheep are yearlong residents. Their numbers have increased from a population of 14 animals to 140 sheep.

The South Fork Basin is crucial mule deer winter range. The Murderer's Creek Wildlife Management Unit provides cover and forage for deer and elk when snow forces them to lower elevations. Crucial elk winter range and summer range for small elk herds is present. Aldrich Mountain is summer range for antelope, also. The antelope population is estimated to be 100. Valley quail are found in side drainages. The corridor also provides good chukar habit. Mountain quail and ruffed and blue grouse can also be found. It should also be noted that the Murderer's Creek Herd Management Area was established for 100 wild free-roaming horses.

Natural predators are also a key component to habitat stability. Mountain lion and bobcat occur in the South Fork corridor. Mink, beaver, raccoon, river otter, coyote, rattlesnake, and ground squirrels are common species. Golden eagles, redtail hawks, and prairie falcons nest in the canyon. Mourning doves occur from spring to fall. Mallards, cinnamon teal, and wood ducks also use the area.

Diversity of habitat is also dependant on ecological condition. The majority of the riparian zone on the South Fork is overall, in mid-seral condition. In 1980, 79 percent of riparian habitat was found to be in poor to fair condition. In the Murderer's Creek Allotment, the uplands in the two riparian pastures are both in a downward trend, but riparian habitat is upward in trend. Riparian and upland habitats on the Big Baldy Allotment show an upward trend. The allotments employ a spring grazing and rest rotation system, respectively. In the past, the Rockpile Allotment grazing system was not followed;

ris lead to heavy overgrazing on the riparian. In the past three years, due to changes in livestock management, the condition here has improved to fair. Progress towards a later seral[2] state is being made. Coyote and peachtree willow and red-osier dogwood are important riparian species growing on the banks. An interdisciplinary team is presently involved in establishing permanent trend studies and monitoring as part of a multi-agency Coordinated Resource Plan. Wildlife populations are expected to increase in future years.

In portions of the South Fork, particularly above County Road 67, historic floodplains have been converted to agricultural lands. On the majority of these lands, vegetation has been converted to pasture grasses. This creates a seasonal forage base for a few wildlife species, particularly mule deer, but due to the reduction in habitat structure and diversity the majority of wildlife species naturally occurring in these areas are reduced in numbers or eliminated entirely. Due to recent public concerns on riparian management this situation is changing, and ongoing projects are providing for reestablishment of portions of the riparian habitats historically occurring along this river.

Available archaeological and ethno-historic information reveals that a wide variety of wildlife resources were exploited within the John Day River Basin most recently by groups belonging to the Confederated Tribes of the Warm Springs and Umatilla. Treaties signed by both groups in the 1850's with the U.S. government provide for "... the privilege of hunting...on unclaimed lands in common with citizens, is also secured to them". Hunting rights on ceded lands continue today and are regulated by the respective tribes similarly to those imposed on the Euro-American population. Whether or not hunting activities are occurring within the river corridor is not known.

PRELIMINARY FINDING

The South Fork is a key wildlife area due to the diversity and condition of habitats found in the corridor. Diversity of vegetation habitats varies from grass/sagebrush hillsides providing forage for big game species and nesting for many migratory and resident bird species to mature ponderosa and fir forests providing habitat for a wide variety of species. Timber in the corridor and adjacent to it are largely uncut, and this factor is important in maintenance of existing wildlife diversity as surrounding lands become increasingly managed. In additional to the riparian, sagebrush and timber vegetation types, mountain mahogany and bitterbrush types also occur within the area, providing a valuable mix of vegetative types.

The habitat diversity of the South Fork of the John Day, in addition to the variety of wildlife species and life forms it has the ability to support, make the river corridor an outstandingly remarkable area. This finding upgrades the "significant" finding noted in the Congressional Record. The presence of a threatened species, category 2 species, a large population of Lewis' woodpeckers, and the potential for many sensitive species enhances the river's value even further. Big game species are important for the recreational experience they provide, but native non-game species are also very valuable as a resource and indicator of diversity.

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[2]In reference to "ecological succession", which is defined by Ecology and Field Biology (Smith 1966) as "an orderly and progressive replacement of one plant community by another until a relatively stable community occupies the area."

Habitat stability is a product of proper ecological management. Management should continue to improve upon seral conditions in riparian zones. Climax riparian, as well as old growth coniferous stands, are scarce on public land and thus qualify for management as outstandingly remarkable values. Overall condition of habitat within this corridor is good. Disturbance to wildlife habitat is due primarily to livestock grazing and the South Fork road. Historic livestock grazing substantially reduced the quality of the area, but changes within the last decade has allowed habitat to improve, with increased vegetation diversity and habitat structure now providing a fair habitat rating. The potential is high for further improvement. The impacts from the South Fork road, while substantial from the standpoint of lost habitat and disturbance, are not mitigatable unless the road is closed.

GEOLOGICAL/PALEONTOLOGICAL VALUES

Criteria for Outstandingly Remarkable Rating

The river or the area within the river corridor contains an example(s) of a geologic feature, process, or phenomena that is rare, unusual, one-of-a-kind, or unique to the geographic region. The features(s) may be in an unusually active stage of development, represent a "textbook" example and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, and or other geologic structures).

DISCUSSION OF GEOLOGIC/PALEONTOLOGICAL VALUES

The John Day Basin has a complicated geologic history which has resulted in a diverse assemblage of rocks. These rocks include masses of oceanic crust, marine sediments, a wi. variety of volcanic and volcanic derived rocks, ancient river and lake sediments, and recent river and landslide deposits. On the South Fork of the John Day, the designated river segment is comprised mostly of basalt and complex pre-Tertiary rock. Significant amounts of ground water probably are stored in this basalt.

The northern portion of the river cuts through the east end of the Ochoco Mountains and the continental flood-basalt of the Columbia River Basalt Group. The southern portion of the segment cuts through Jurassic and Triassic age marine sedimentary rocks and some volcanic rocks. Some of these rocks are slightly metamorphosed but most are unaltered. Overall, the area is structurally complex with numerous faults and small folds, with the regional trend being northeast-southwest.

In terms of scenery, the exposures of columnar jointing and feeder dikes are very impressive at places along the river, particularly between Smokey and Oliver Creeks and in the gorge near Black Canyon Creek. Picture Gorge basalts dominate the extent of this northerly end of the mapped region, and the few paleontological items of interest consist of interbasalt root and trunk casts.

There is excellent potential for paleontological resources in the Mascall Formation within the northerly portion of the designated corridor. This formation contains widespread and abundant vertebrate fossils and minor plant fossils. Paleontological values are very significant, especially north of Deer Creek. Marine invertebrates, fossiliferous outcrops, and fissure dikes can be found in the area.

The exposures of considerable paleontological interest begin along the southern end of t area. South of Izee the South Fork has cut through a Jurassic (150 - 190 mya) sequence o. marine volcaniclastics. This sequence of the Suplee, Nicely, Hyde, Snowshoe, Trowbridge, and Lonesome Formations contains ammonites, bivalves, and rhynconellid brachiopods. Some of the ammonites are quite significant but have been "hit" by amateur collectors.

posits of chromium, mercury, asbestos, and gold occur in the subbasin but there are no currently active mines or mining claims and few mines have been active in the past.

PRELIMINARY FINDING

The paleontologic features and opportunities for scientific research, interpretation, and aesthetics available on the South Fork of the John Day River are determined to be of outstandingly remarkable value. The potential for excellent paleontological resources within the northerly portion of the preliminary wild and scenic boundary and the known exposures on the southern end are of major importance to this finding as is the international significance of these local resources. The geologic features, while scenic, are not determined to be unique to the geographic region and are therefore considered significant.

BOTANICAL/ECOLOGICAL VALUES

Criteria for Outstandingly Remarkable Rating

The river or area near the river must contain nationally or regionally important populations of indigenous plant species. Of particular importance are species considered to be unique or populations of federally listed or Candidate Threatened and Endangered Species. When analyzing vegetation, additional factors such as diversity of species, number of plant communities and cultural importance of plants may be considered.

DISCUSSION OF BOTANICAL/ECOLOGICAL VALUES

Vegetation in the John Day River Canyon is a diversity of plant communities resulting from past human uses and environmental factors. Vegetation in the river corridor has been affected by fire control, road construction, unmanaged livestock grazing and other management practices.

Landcover along the South Fork of the John Day River is predominately coniferous forest and rangeland with agricultural areas generally located adjacent to streams. According to the Bailey-Kuchler system of classifying ecosystems, the South Fork area is in the Rocky Mountain Forest Province and its potential natural vegetation is western ponderosa forest and sagebrush steppe.

Juniper/bunchgrass communities are found on the benches below the rims and on steep slopes. Big sagebrush/bunchgrass communities are found on the rims and steep, rocky slopes below the forested sites. On the southerly aspects there are ponderosa pine-mountain mahogany/elk sedge-Idaho fescue communities. Forested sites, supporting Douglas fir/elk sedge communities, occur on the steep north-facing slopes. Western juniper trees occur throughout these communities. Vegetation is generally in mid- to late seral status.

Much of the area consists of a historically fire-dependent ecosystem. Frequent wildfires maintained the non-forest vegetation as predominately bunchgrass-dominated communities through removal of juniper and sagebrush. Through grazing practices which removed the grasses and forbs necessary to carry wildfire, and to a greater extent through modern day fire suppression, wildfire is no longer a common occurrence in the area.

The riparian areas along the river host a diversity of willows, shrubs and hardwood trees. In the lower elevations, the riparian forest tends to be composed of cottonwoods, hawthorne, and alder while the higher elevations tend to support a riparian forest of birch, alder, and dogwood. Ecological status of the riparian vegetation along the South Fork is generally mid-seral, although some sections of the river are in early seral condition.

According to an inventory by The Nature Conservancy, the Shake Table Mountain and Jackass Creek areas possess unique vegetation communities and protected plant species. Two Federal Candidate Category 2 species are known to occur within the preliminary designated boundary of the river. They are:

Mimulus washingtonensis (Washington monkeyflower)
Astragalus diaphanus var. diurnus (John Day milk vetch)

The South Fork of the John Day River is the only known area worldwide where the Astragalus diaphanus occurs. As an annual/biennial, this plant is somewhat resiliant to disturbance. This, plus its preferred habitat of barren soils makes this species unaffected by most land management practices. Thelypodium eucosmum (arrow leaf thelypody) , another Federal Candidate Category 2 species, is highly suspected of occurring in the area but has yet to be documented.

Within the South Fork of the John Day River area there are approximately 100 acres of commercial forestland classified as withdrawn and approximately 20 acres classified as Fragile Restricted. These parcels range from 5-12 acres in size and are scattered along the river. If harvest ever occurs, it would most likely be for salvage only.

Past timber harvesting within this corridor has been salvage harvest only, on four separate occasions, since practically all of the commercial forestland within the corridor is classified as withdrawn from the timber base. Also, no future forest management activities are planned within the corridor. Therefore, past logging activities have had no adverse impact on the current wildlife and fish habitat values and future activities should have no adverse impacts on the future values of the corridor.

The available archaeological and ethno-historic information reveals that a wide variety of plants were exploited within the John Day River Basin most recently by groups belonging to the Confederated Tribes of the Warm Springs and Umatilla. Treaties signed by both groups in the 1850's with the U.S. government provide for "the privilege of...gathering roots and berries... on unclaimed lands in common with citizens, is also secured to them". Recent information suggests that traditional gathering practices are still being pursued by tribal members, but no specific data exists on the use of plant resources within the river corridor.

PRELIMINARY FINDING

The South Fork of the John Day River corridor contains a number of relatively pristine plant communities and two significant special status plant species. The diversity of plant communities provides important wildlife habitat, interpretive opportunities, and aesthetic values to the area and is therefore considered to be an outstandingly remarkable value.

Due to human use of the resource, past early seral conditions limited wildlife habitat especially within riparian areas. This significantly reduced habitat availability thereby reducing wildlife populations as well. Multitudinous government agencies and private citizens have worked cooperatively to enhance vegetative conditions on several miles of the South Fork and its tributaries as part of a multi-agency Coordinated Resource Plan. There is opportunity to continue to improve the qualities of the South Fork's vegetative communities through this type of cooperative effort.

PREHISTORIC/TRADITIONAL USE VALUES

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes. Of particular value will be pristine sites that have not been disturbed.

DISCUSSION OF PRE-HISTORIC/TRADITIONAL USE VALUES

Most known cultural sites are located on the main stem of the John Day River between Clarno and Cottonwood Bridge where an intensive cultural inventory has been conducted. Unfortunately, a limited amount of cultural resource surveys have been conducted along the South Fork of the John Day River though the area most likely has excellent potential to provide information about past cultures and their use of riverain resources.

Two major surveys were conducted for timber sales south of Deer Creek in 1981 and 1983 but only 5 prehistoric sites and one prehistoric isolate were recorded. The recorded sites were mostly lithic scatters, some with shallow subsurface deposits. There is evidence to suggest that a prehistoric trail route exists in the designated area that once connected the Crooked River to the South Fork of the John Day.

There are indications that at least one rock art site exists within the corridor. A prehistoric campsite and tool manufacturing site has been documented on the South Fork and potential for discovering more prehistoric resources along this fork's corridor range from low to high depending on the section.

Available data is limited concerning use of the river corridor for traditional use or religious practices. According to the involved Native American groups, any area where native plants and animals occur are considered traditional use locations. This would indicate that a majority of the BLM lands within the corridor could be used for traditional use practices, including grazing, as provided in the treaties for each tribe. A concerted effort to conduct ethnological and ethnobotanical research should be pursued in order to illuminate our current understanding of the past use of the river canyon. Recent religious practices within the river corridor are unknown and will most likely remain so for obvious reasons. Again, ethnological work would probably be useful for providing a general knowledge about certain ceremonies and practices without revealing particular significant locations, other than in general terms.

PRELIMINARY FINDING

Although few cultural resource sites have been recorded within the South Fork of the John Day River corridor, there is excellent potential for discovering significant prehistoric sites associated with the river. Should more information be recorded, interpretive possibilities for the prehistoric cultural resources of the area seem promising. The river canyon is an important traditional use area to Indian tribes and is associated with treaty rights on ceded lands, making the cultural resource values on this stretch of river notable. Appropriate tribes will be consulted with as part of the planning effort.

HISTORIC/CULTURAL VALUES

Criteria for Outstandingly Remarkable Rating

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual, or one-of-a-kind in the region. A historic site(s) and/or feature(s) in most cases is 50 years or older. Of particular significance are sites or features listed in, or are eligible for inclusion in, the National Register of Historic Places.

DISCUSSION OF HISTORIC/CULTURAL VALUES

A limited amount of cultural resource survey has been conducted along the South Fork of the John Day River however there is moderate potential for discovering homesteads, irrigation features, and other historic sites associated with homesteading, logging, and mining.

According to Nielsen, Newman, and McCart (1985), an old wagon road used during the mining boom of the mid 1800's crosses the South Fork somewhere near the ridge south of Martin Creek and Magic Lantern Creek. Wagon ruts and some ancient juniper stumps used as drag logs are still visible in the area. The wagon road apparently returned to the South Fork near Aldrich Gulch and headed north along the river towards Dayville.

Some of the drainages and tributaries of the South Fork have intriguing names such as Murderer's Creek and Magic Lantern Creek, no doubt with interesting histories behind the Many of these names have numerous conflicting stories about their origin.

The crossroads community of Izee near the junction of the Post-Paulina Highway and the Dayville-Hines Road was once an incorporated town. A post office apparently existed at Izee between the years of 1889 - 1954. A grange hall and school still endure today to tell the story. In addition, the remains of Old Ellingson Mill between Deer and Indian Creek still exist, though located on private land. A few old quarry sites and one burned historic cabin are also present in places near the river.

PRELIMINARY FINDING

Although few cultural resource sites have been recorded within the South Fork of the John Day River corridor, there is excellent potential for discovering significant historic sites due to the existence of the river. Should more information be recorded, interpretive possibilities for the historic cultural resources of the area would likely be promising.

OTHER SIMILAR VALUES

Assessments of additional river-related values may be completed upon receiving the results of subject expert solicitations for information and significance.

APPENDIX A

INFORMATION SOURCES AND REFERENCES CITED

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APPENDIX B

PUBLIC INVOLVEMENT PLAN FOR RESOURCE ASSESSMENT

1. Complete internal draft of South Fork of the John Day River Resource Assessment. Ongoing review and editing using interdisciplinary approach.

   Internal Interdisciplinary Review Team:
   - Don Smith, Assistant District Manager
   - Dick Cosgriffe, Area Manager
   - Brian Cunninghame, Public Affairs/Project Manager
   - Wayne Elmore, Natural Resource Specialist
   - SuZan Meiners, Recreation (review team leader)
   - Dan Wood, Outdoor Recreation Planner
   - Roy Pearl, Wilderness (NRS)
   - Brad Keller, Wildlife Biologist
   - Sarah Nichols, Student Trainee (Wildlife Biologist)
   - David Young, Fishery Biologist
   - James Eisner, Student Trainee (Fisheries)
   - Dennis Davis, Geologist
   - Ron Halvorson, Botanist (NRS)
   - John Zancanella, Archaeologist

   External Professional Review:
   - Suzanne Crowley Thomas, USFS, archaeology/history
   - Errol Claire, ODFW, wildlife/fish
   - Ted Fremd, NPS, paleontology
   - Frank LeMay, ODFW, wildlife/fish

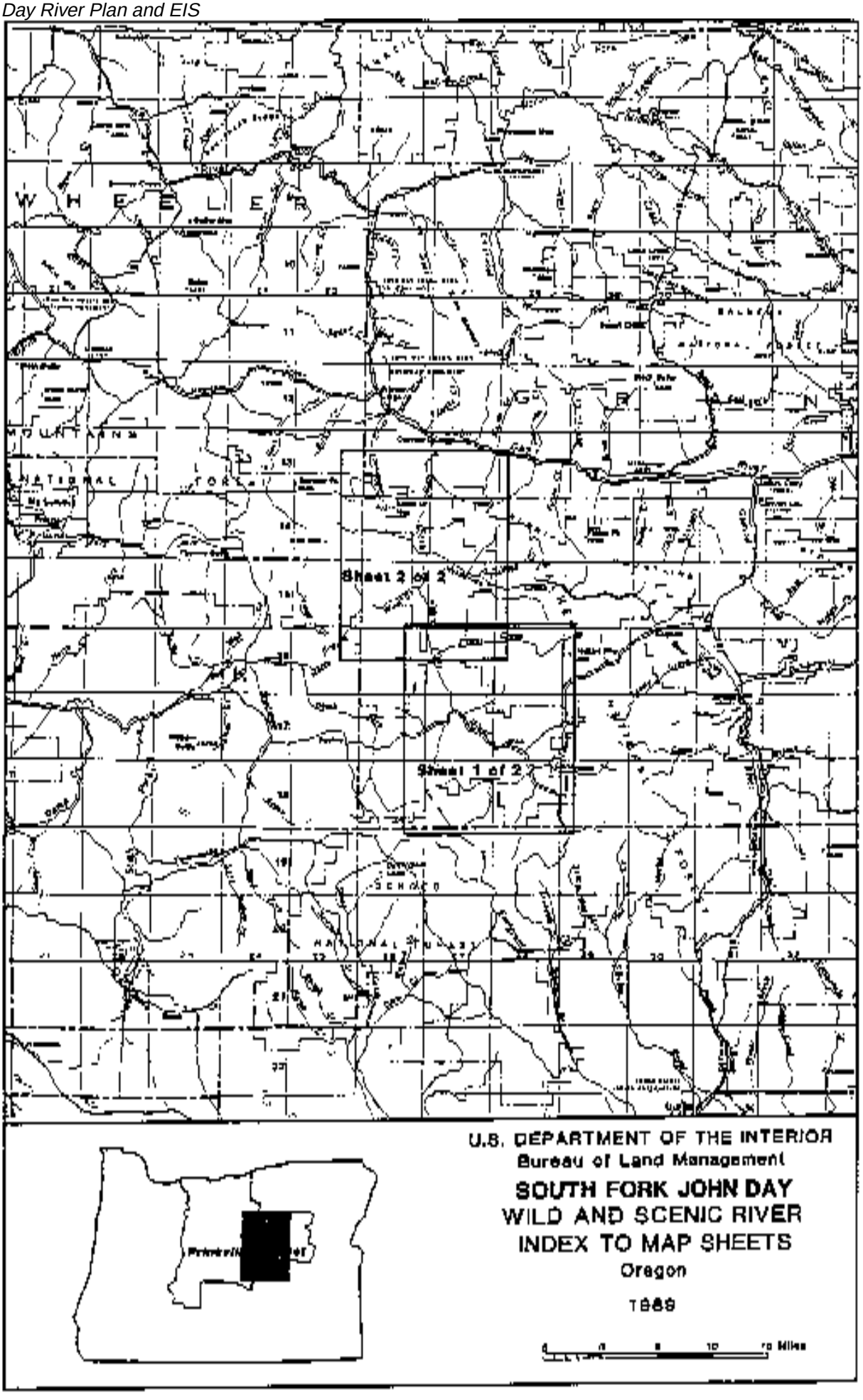
2. Complete revised internal draft and have Management Team Review.

3. Mail Resource Assessment draft to interested public and professionals for comment.

4. Revise draft based on public comment and send to State Office.

APPENDIX C

RIVER MAPS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SOUTH FORK JOHN DAY
WILD AND SCENIC RIVER
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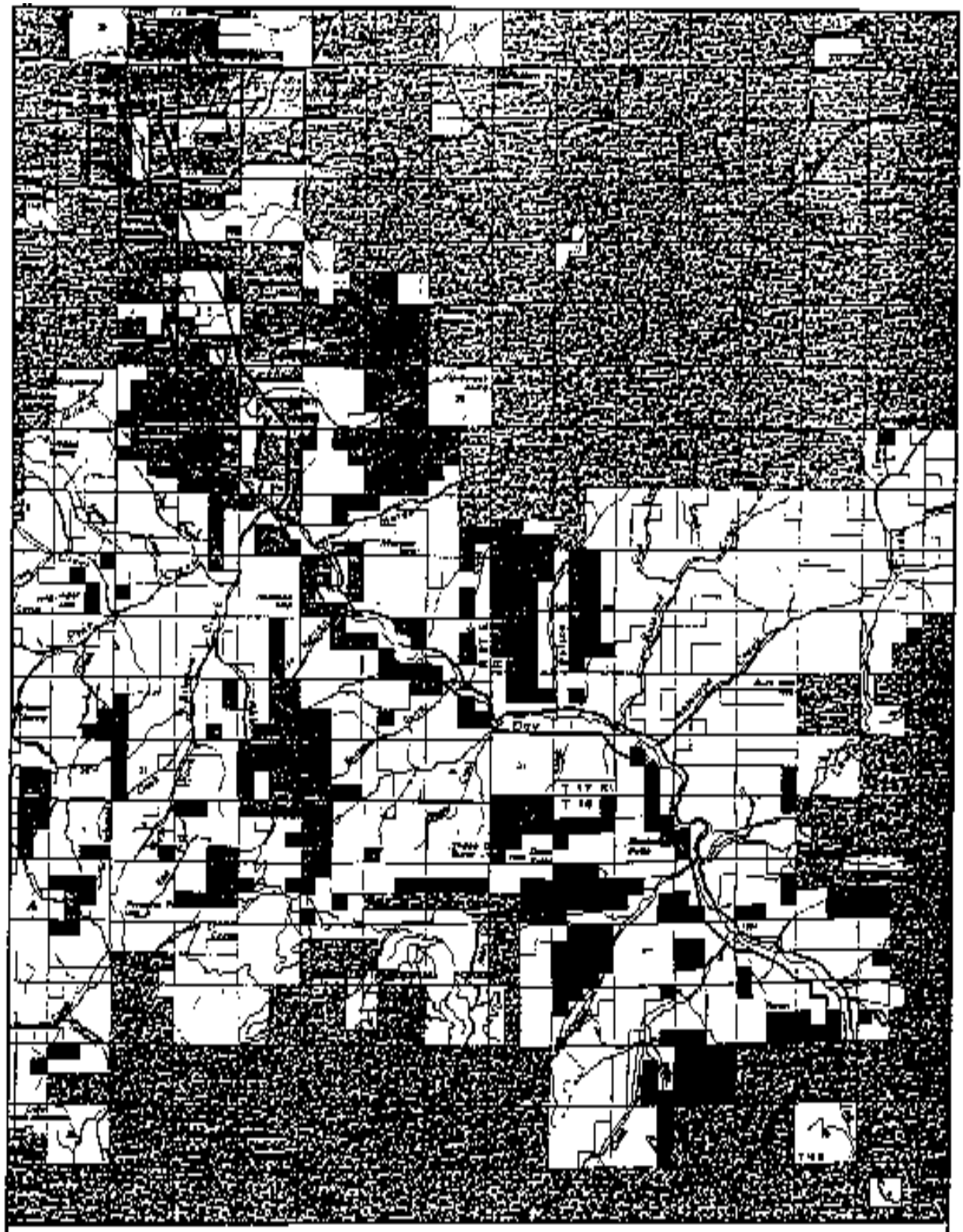
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USFS Lands
Private Lands
Proposed Wild and Scenic River Administrative Boundary
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
SOUTH FORK JOHN DAY
WILD AND SCENIC RIVER
PRINEVILLE DISTRICT
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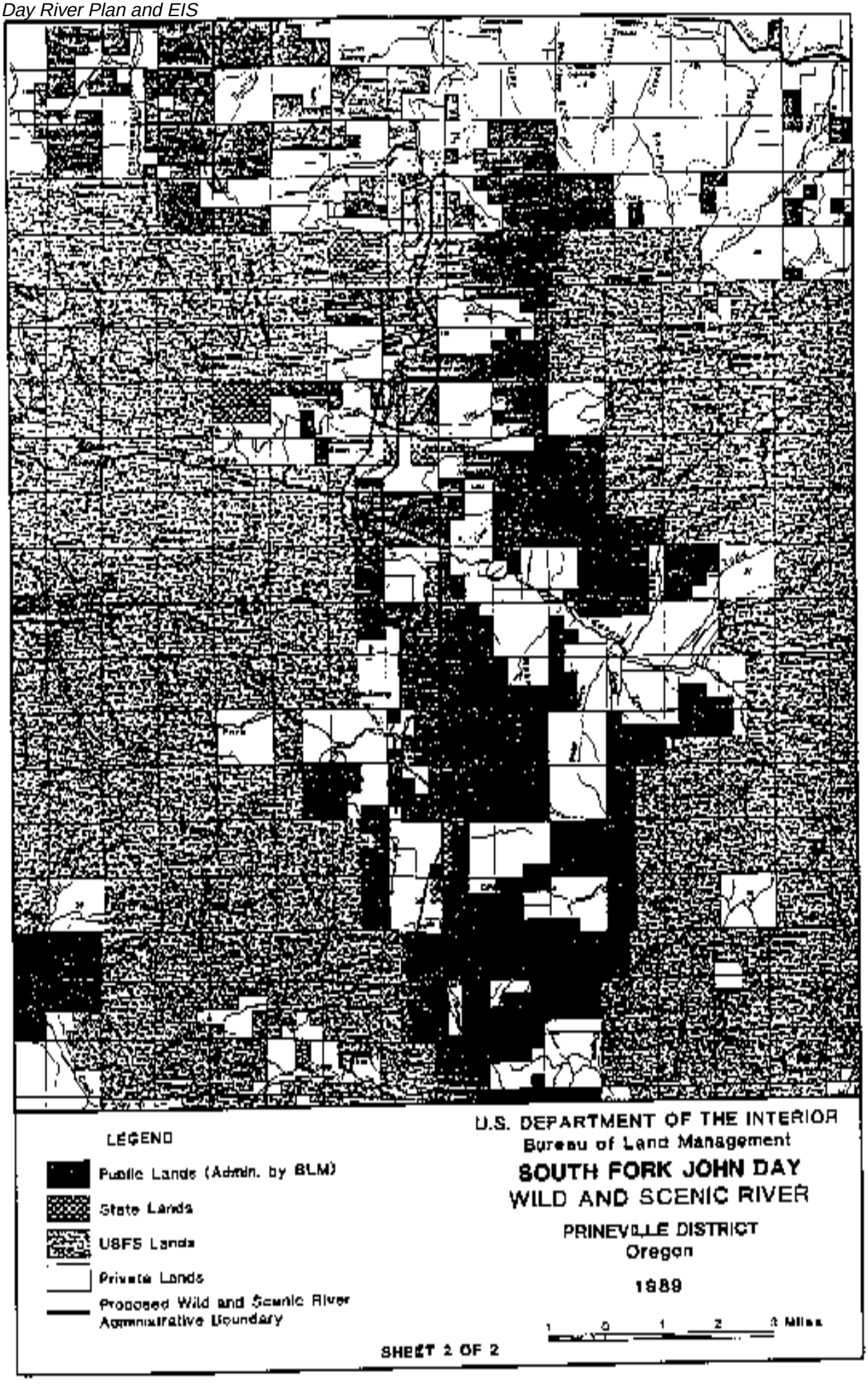
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Public Lands (Admin. by BLM)
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USFS Lands
Private Lands
Proposed Wild and Scenic River Administrative Boundary
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Bureau of Land Management
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WILD AND SCENIC RIVER
PRINEVILLE DISTRICT
Oregon
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APPENDIX D

RESOURCE ASSESSMENT PROCESS (IN DEPTH)

I. PURPOSE AND NEED

The importance of a thorough resource assessment cannot be overstated. The resource assessment serves as the foundation of the river management planning process. It determines which river-related features are truly outstandingly remarkable or contribute substantially to the river setting and the functioning of its ecosystem. It is not intended to serve as an eligibility evaluation.

Usually the initial step in the river management planning process, the resource assessment must take into consideration all features which are directly river-related. This early identification and evaluation will help ensure that significant features are not overlooked and that a holistic approach to investigating the inter-relationship among various features is achieved.

The identification and documentation of outstandingly remarkable and other significant values is a first step in developing management prescriptions that protect and enhance river values. A thorough resource assessment provides the basis upon which management decisions affecting resources within the planning area can be made during the interim period pending plan completion and approval. Additionally, the findings and conclusions reached at the end of the assessment effort will be used in management plan scoping, including specific issue identification and establishment of final administrative boundaries.

There are three components of the resource assessment process. First is the identification of any outstandingly remarkable values not specifically identified by Congress, but found present nevertheless, within planning area boundaries. Second is the identification and determination of significance levels for river-related values which are not determined to be outstandingly remarkable, yet contribute substantially to a river's overall character. Third is the confirmation of the outstandingly remarkable values set forth for specific rivers in the Omnibus Oregon Wild and Scenic River Act (see the Congressional Record - Senate, vol. 134, dated October 7, 1988).

It is important to remember that the term "outstandingly remarkable" as used in the Wild and Scenic Rivers Act has never been precisely defined. Consequently, any determination of outstandingly remarkable values is a matter of informed professional judgment and interpretation. The only firm expectation is that the basis for the judgment be adequately documented in the resource assessment.

II. VALUE ASSESSMENT

All values assessed should be directly river-related, or owe their existence to the river ecosystem. The rationale for a direct river relationship is that the program involves the Wild and Scenic Rivers System rather than a generalized land and resource conservation program. It is therefore appropriate to focus attention on the river and resources directly related to it.

The resources to be assessed are specifically identified in the Wild and Scenic Rivers Act (PL 90-542) and include scenic, recreation, geologic, fish and wildlife, historic, cultural, and other similar values. Other similar values include, but are not limited to, hydrologic, botanic and ecological resources.

III. SIGNIFICANCE THRESHOLDS

In order to be assessed as "outstandingly remarkable", a river-related value must be a unique, rare or exemplary feature that is significant at a regional or national level. Those river-related values that are not assessed as outstandingly remarkable but contribute substantially to the functioning of the river system and river setting should be described and their level of significance indicated.

The geographic regions (8) described in the 1990 Statewide Comprehensive Outdoor Recreation Plan (SCORP) for Oregon may be used for comparing certain river-related values among the rivers in a "region". Because of the location of rivers in specific SCORP regions to contiguous state borders (Washington, Idaho, Nevada, and California), geographic regions can be modified as necessary to provide the basis for meaningful comparative analysis for non-recreation values such as fisheries or cultural resources.

Guidelines for assessing values are meant to set minimum thresholds to establish outstandingly remarkable values and are illustrative, not all-inclusive. In some cases, a value may meet some or all of the criteria, yet may not, for a well-documented reason, be determined to be an outstandingly remarkable value. In another situation, a value may be called outstandingly remarkable for a reason not listed in these guides. The important and critical step is to document the rational for the determination.

COMMENTS TO DRAFT RESOURCE ASSESSMENT

The BLM received many comments from the public after the draft Resource Assessments were published. Some comments specifically addressed the Resource Assessment while others pertained to river planning. Only those comments specifically addressing this Resource Assessment will be included here. Comments on river planning will be addressed in the John Day River Management Plan and Environmental Impact Statement.

United States Department of the Interior
NATIONAL PARK SERVICE
John Day Fossil Beds National Monument
420 West Main
John Day, Oregon 97845

IN REPLY REFER TO:

N3019

13 November 1990

Suzan Meiners
Bureau of Land Management
P.O. Box 550
Prineville, Oregon 97754

Dear Suzan:

I regret not having more time to look over the South Fork Wild and Scenic River prelim boundary material you sent me for comment on paleontological values. The following notes might be helpful.

In terms of scenery, the exposures of columnar jointing and feeder dikes are very impressive at places along the river, particularly between Smoky and Oliver Creeks and in the gorge near Black Canyon Creek. Picture Gorge basalts dominate the extent of this northerly end of the mapped region, and the few paleontological items of interest consist of interbasalt root and trunk casts.

The exposures of considerable paleontological interest begin along the southern end of the area. South of Izee the John Day River has cut through a Jurassic (150 - 190 mya) sequence of marine volcaniclastics. This sequence of the Suplee, Nicely, Hyde, Snowshoe, Trowbridge, and Lonesome Formations contains ammonites, bivalves, and rhyconellid brachiopods; some of the ammonites are quite significant but have been "hit" by amateur collectors.

As far as the main stem, there are portions of the river where the traveller is exposed to extraordinary outcrops of Clarno basalts, lahars, and assorted volcaniclastics, many of them right at the river level. These offer excellent material for study of volcanic processes and related depositional environments. If these aren't outstanding, I am puzzled by the yardstick that is employed. Perhaps it is because these outcrops do not occupy the majority of the drainage, or perhaps there simply is no advocate for geology. At any rate, the paleontological values are outstanding by any criteria.

Sincerely,

Ted Fremd
Paleontologist

Confederated Tribes of the Umatilla Indian Reservation

RESOURCE ASSESSMENT

South Fork of the John Day River
National Wild and Scenic River

Request for Amendment and Addition to USDI
Bureau of Land Management and USDA Forest Service
Draft Wild and Scenic River Resource Assessment
August 1991

Submitted by:
Confederated Tribes of the Umatilla Indian Reservation
Department of Natural Resources
Environmental Planning/Rights Protection
December 1991

We appreciate the opportunity to review and provide comment on the Wild and Scenic River/Draft Resource Assessment for the South Fork of the John Day. The comments reflect the Tribes genuine concern and interest for the River's future management plans.

(1) The restoration of the riparian areas is a major concern of the CTUIR. The resource assessment confronts the excessive road construction, fire suppression, and damaging grazing practices which occurred in the past but more focus needs to be put on the future restoration plans. Standards and time frames need to established for restoration to accomplish DFC's. The resource assessment should also point out that the river corridor is in need of aggressive grazing management due to its fragile state.

(2) Water quality should also be addressed (since it is directly tried to the riparian conditions) noting whether or not they are in conformance with Oregon State Water Quality Standards. This will provide the framework for management plan development, and will guide development of a plan to bring temperatures down, and if necessary assign a target temperature goal.

(3) The draft should discuss the competitive uses for water during the year (i.e. the irrigation needs vs. fisheries maintenance). The assessment should also address the results of this competitive use that effect the "outstandingly remarkable" fisheries value.

√ (4) A separate section on data gaps/research needs to be added to the resource assessment. This should include a review of areas where additional information is necessary to manage the resources of the corridor.

(5) The resource assessment points out that the John Day River has one of the last wild anadromous fish runs in the Pacific Northwest. It is common among resource assessments to conclude that good or excellent fish habitat exists, however, to support such a statement, accurate fish habitat surveys are needed for mainstem and tributaries for effective management plan development. This recommendation is consistent with intent and letter of the USFS Tri-Regional Anadromous Fish Policy Implementation Guide.

√ (6) Tribal members of the Confederated Tribes of the Umatilla Indian Reservation have seasonally occupied the S.Fk John Day River for fishing and hunting purposes at Daual and Accustomed areas in conjunction with the Warm Springs Tribe. Because of this historical occupancy, a separate cultural resource research effort is needed. The current analyses are inconsistent with Federal and Regional mandates and directives

(i.e. Forest plan cultural resource inventory requirements, National Historic Preservation Act guidelines for resource assessment). Given that the resource Assessment objective is to assess the resource significance of river related values, it is imperative that a thorough effort of information collection be made. In addition to the standard walk-through archaeological surveys, the Forest and BLM need to work with the CTUIR to collect the ethnohistorical information that may well set some sites of localities apart from others. Further, good ethnohistorical information is necessary to conduct comprehensive ground surveys.

(7) The resource assessment should explain the reasons for the absence of Chinook in the South Fork Basin.

(8) The wildlife section would be complete with a more detailed section describing the diverse wildlife habitat that is available (i.e. the large acreage of uncut forest on the West side of the River.) The section should address issues such as, What are the future management plans for the forested area? How much does this forested section contribute to the existing fish and wildlife populations and habitat?

(9) The CTUIR was a co-author in developing the Upper Grande Ronde River Anadromous Fish Habitat Protection, Restoration, and Monitoring Plan. This document was drafted in response to concerns over continuing declines of Snake River anadromous fisheries stocks, losses of Upper Grande Ronde Spring Chinook in 1989, and the degraded condition of habitat in the Grande Ronde watershed. The document addresses some pertinent issues and presents a future plan to counter act the degradation of the habitat and species. We recommend using this document as a land management model. I have attached a copy of the plan for your review.

Overall the resource assessment covers a board array of natural resources that make the South Fork John Day River and it's corridor significant. The CTUIR supports the designation of the scenic, fishery, recreational, botanical, and wildlife with the condition that the above concerns are thoroughly addressed amended to the resource assessment.

Sincerely,

Tricia Quaempts

Tricia Quaempts
Rights Protection Assistant
CTUIR

taq a:\SFKJDAY.WSR

Oregon Trout

Speaking out for Oregon's fish

P.O. Box 19540 • Portland, Oregon 97219 • (503) 244-2292

16 Sep 91

Harry R. Cosgriffe
Central Oregon Resource Area Manager
Bureau of Land Management
Prinville, OR 97754

Dear Mr. Cosgriffe:

I appreciate the opportunity to comment on the resource assessment for the South Fork of the John Day River. As a resident of Grant County for the past eleven years I have a keen interest in management policies affecting local resources...particularly those resources that are as important as water and fisheries. Although the South Fork is a local waterway, decisions concerning its future could be felt throughout the John Day River Basin (JDRB).

As noted in your assessment the JDRB is unique with respect to wild anadromous fish runs. The gene pools contained within the populations of this basin could be vital to the vigor and survivability of anadromous species throughout the middle and upper Columbia River Basin (CRB). Considering the present condition of anadromous runs throughout the CRB I believe it would be difficult to overstate the importance of the JDRB to salmonid production.

A major tributary within the JDRB, the South Fork has the capability to make an important contribution to the system by providing high quality water, significant flows, and good spawning areas for steelhead and other resident species. Any activities that would adversely affect these contributions could have far-reaching consequences.

Before constructing a fish passage around Izee Falls it might be beneficial to consider possible effects on fish populations above that point. It is my understanding that populations of redband trout above the falls may have a genetic influence on fish below the falls. If this is the case then I suppose the question of whether the benefits of an expanded spawning area for steelhead would outweigh the potential reduction or loss of sources of genetic variability from existing fish populations above the falls.

I am sure anyone familiar with this part of the country is aware of the past and present impacts of logging, grazing, and mining on riparian resources. Fortunately there is a move toward correcting past abuses and formulating policies that recognize the importance of a wide

variety of resources. As noted in the assessment, there are no recreational developments along the South Fork. I can appreciate the value of recreational opportunities yet I also have an understanding of how vulnerable some systems are to heavy use, regardless of the nature of that use. I would certainly hope that any future considerations of recreational developments will strongly consider the potential impacts of increased human activity.

Once again I appreciate the opportunity to make these views known and would like to be kept informed of further steps in developing a management plan for the South Fork.

Sincerely,

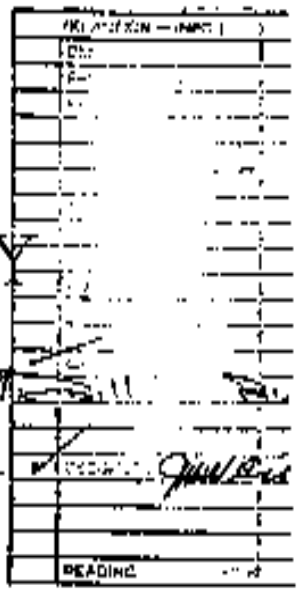
Ron Gaither

Ronald E. Gaither
Oregon Trout

cc: Myron

THE WILDERNESS SOCIETY

NORTHWEST REGION



December 9, 1991

James Kenna
Deschutes Area Manager
Bureau of Land Management
P.O Box 550
Prineville, Oregon 97754

Dear Mr. Kenna:

Thank you for the opportunity to review the draft South Fork John Day Wild and Scenic River Resource Assessment. The Wilderness Society fully supports the "outstandingly remarkable" designation of the scenic, fishery, recreational, botanical, and wildlife values. However, there are several areas of concern to The Wilderness Society which we address below.

Our greatest concern is the condition of the riparian zones and other botanical values. Human uses of the river corridor have so stressed potential climax riparian zones, that most are in early seral stages. The draft assessment frankly describes how past grazing has interrupted ecologically significant activities ranging from nesting to natural wildfire. It also admits that fire suppression, road construction, and "other management practices" have changed the makeup of natural plant communities. But the draft does not and should clearly characterize these "changes" or the efforts made to reverse them.

We oppose improving seral conditions by implementing fencing. As you no doubt know, fencing will interrupt wildlife movement, as well as compromise the area's scenic values which are already undermined by the road. We are concerned that the area, especially the riparian zones, will not be able to rebound without, at least, a suspension of all grazing activities. Such a suspension would also be an appropriate measure to preserve those climax zones whose scarcity, as the draft concedes, qualifies them for "management as outstandingly remarkable values." (Page 14) The plan must not risk endangering the two Federal Candidate Category 2 species that exist in this corridor. The unique occurrence of Astragalus diaphanus makes this corridor

610 SW ALDER, SUITE 915, PORTLAND, OR 97205
(503) 248-0452

particularly important. **Have Astragalus diaphanus communities been affected by any of the "management practices" that have changed other vegetation?**

The "outstandingly remarkable" designation of the fishery resources recognizes the sensitivity of the redband population and the importance of the John Day River basin as one of the last wild anadromous fish runs in the Pacific Northwest. We must do everything possible to enhance and protect these regionally significant resources. The proposed fish passage around Izee Falls should be carefully scrutinized. It would be a shame to destroy existing successful populations in an attempt to create new ones. The Wild and Scenic Rivers Act calls for the protection and enhancement of values on a free-flowing river. As a man-made disruption of the natural river flow, this proposed passage is inconsistent with the requirements of the Act.

In addition, the draft should explain the absence of Chinook in the South Fork basin. We are also concerned that the current policy of supplementing the wild redband population with hatchery fingerlings is more a response to recreational demands than a response to the long-term welfare of the "sensitive species" redband that have to compete with these hatchery fish.

The assessment is also vague regarding how the "sport catch of 10,000 fish," has affected the redband and steelhead populations. Regarding the fishery preliminary findings, we request a thorough description of the efforts and results of attempts to "restore the riparian system." **In what ways has water quality been "significantly improved?" What are the "increased benefits to the fishery?"**

As to water quality, the draft describes how the demands for irrigation use and fisheries maintenance are at their greatest during the same months. But it should also describe the results of this competition for this "outstandingly remarkable" fishery resource. **How have agricultural activities affected the riparian zones? What efforts have been made to seek alternative irrigation technology?** The draft's opening river description should expand on its vague comments regarding the "mostly gravel or dirt road." **How close is that road to the river? Does run-off from the road contribute to the further erosion of the stressed riparian zones or any decline in water quality? Does the road present any danger to wetlands or other riparian habitats?**

Regarding the recreation section, the Wilderness Society is concerned that without assessing the current impact of visitors, the construction of the National Back Country Byway and the likely visitor increase, could cause unforseen damage to riparian zones already stressed by grazing. The predicted increased visitor load requires developing a camping strategy that would either limit or concentrate visitors away from riparian zones and other areas that have been damaged by cattle. However, by

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Prineville District Office
P.O. Box 550 (185 E. 4th Street)
Prineville, Oregon 97754

Su
FYI

IN REPLY REFER TO:
6671

JAN 10 1992

Errol Claire
John Day District
Oregon Department of Fish and Wildlife
P. O. Box 9
John Day, OR 97845

Dear Errol:

I have received many comments on the Resource Assessment of the John Day River. Some of the comments require additional fish expertise that you have. Would you help me answer the following questions:

1. Why are chinook absent from the South Fork Basin?

2. What is the hatchery supplementation policy for the John Day River? What current supplementation actions are going on?

3. What are the interactions between hatchery fish and wild stock in the John Day River, in terms of competition, productivity and disease?

4. Please assess the impact of the present sport catch of fish on redband, steelhead and chinook.

5. What riparian restoration efforts are being made on State owned land in the John Day Basin?

Errol, thanks again for your help. Would you be able to respond by February 15, 1992? Let me know.

Sincerely,

David K. Young
District Fishery Biologist

JAN 17 1992

MEMORANDUM

TO: Dan Wood

FROM: Bob Vidourek

SUBJECT: Response to Wilderness Society Request in Regards to Forest with Corridor in

Future forest management plans west of the South Fork John Day River and within the wild and scenic corridor are none. No planned timber activities are scheduled in the current 10-year plan. Timber management of forest lands within any wild and scenic river corridor, (1/4 mile each side), would be carefully analyzed.

However, since most of these forest lands are classed as commercial forest lands and listed as restricted or non-restricted, we must consider them available for forest management activities (see John Day RMP, 1985).

Some of these commercial forest land acres are listed as withdrawn from the timber base. Efforts to open up more land for timber harvesting within this corridor is very unlikely in this decade.

The forests east of the highway and above the Izee Falls area are in T.16S., R.27E. The history of timber harvesting within this township has been similar to harvesting on any BLM commercial forest lands within this District. That is, all harvesting has been the partial cutting method, which includes overstory removal of 50 - 70% of the overstory, (mature, and/or decadent older trees) and commercial thinning, [harvesting of commercial sized trees down to 10 inches diameter breast height, (DBH)] to a 24 - 35 foot leave tree spacing.

Timber harvesting within this township has been rather light over the past 30 years, especially within the 1/4 mile corridor of the river. Within this corridor, salvage harvest of under 5 MBF each have taken place in the years of 1971, 1968, 1965, and 1961.

The only regular timber harvest operation within this township and within one mile of the east side of the river took place in 1984. Within this timber sale of 2.2 million board feet (MMBF), the western boundaries of the units closest to the river, (three of the twelve units), were approximately 1/2 mile from the east side of the river. In addition, all three of these units were above and well beyond the top of the rims along the east banks of the river.

Included within this 1984 timber sale, no new road construction took place. All road work was maintenance and renovation only.

The existing road network was most likely developed for timber harvests that took place in 1956 (1.5 MMBF) and in 1958 (3 MMBF).

As for future activities east of the river and within this township, a timber harvest operation is scheduled for 1996 or 1997. This is a planned helicopter yarding operation and no harvest unit is planned within 1/4 mile of the river.

As a result of the preceding discussion, it can be determined, that past logging activities have no adverse impact on the current wildlife and habitat values of this corridor. The future, 1996-97, harvest operation should have no adverse impacts on the future values of the subject corridor.

Robert M. Vidmar
1.17.92

APPENDIX J STANDARDS FOR RANGELAND HEALTH

AND

GUIDELINES FOR LIVESTOCK GRAZING MANAGEMENT

FOR

PUBLIC LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT IN THE STATES OF OREGON AND WASHINGTON

AUGUST 12, 1997

Table of Contents

Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington

Introduction

These Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands in Oregon and Washington were developed in consultation with Resource Advisory Councils and Provincial Advisory Committees, tribes and others. These standards and guidelines meet the requirements and intent of 43 Code of Federal Regulations, Subpart 4180 (Rangeland Health) and are to be used as presented, in their entirety. These standards and guidelines are intended to provide a clear statement of agency policy and direction for those who use public lands for livestock grazing, and for those who are responsible for their management and accountable for their condition. Nothing in this document should be interpreted as an abrogation of Federal trust responsibilities in protection of treaty rights of Indian tribes or any other statutory responsibilities including, but not limited to, the Taylor Grazing Act, the Clean Water Act, and the Endangered Species Act.

Fundamentals of Rangeland Health

The objectives of the rangeland health regulations referred to above are: “to promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions; . . . and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands.”

To help meet these objectives, the regulations on rangeland health identify fundamental principles providing direction to the States, districts, and on-the-ground public land managers and users in the management and use of rangeland ecosystems.

A hierarchy, or order, of ecological function and process exists within each ecosystem. The rangeland ecosystem consists of four primary, interactive components: a physical component, a biological component, a social component, and an economic component. This perspective implies that the physical function of an ecosystem supports the biological health, diversity and productivity of that system. In turn, the interaction of the physical and biological components of the ecosystem provides the basic needs of society and supports economic use and potential.

The Fundamentals of Rangeland Health stated in 43 CFR 4180 are:

1. Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity and the timing and duration of flow.

2. Ecological processes, including the hydrologic cycle, nutrient cycle and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

3. Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established Bureau of Land Management objectives such as meeting wildlife needs.

4. Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

The fundamentals of rangeland health combine the basic precepts of physical function and biological health with elements of law relating to water quality, and plant and animal populations and communities. They provide direction in the development and implementation of the standards for rangeland health.

Standards for Rangeland Health

The standards for rangeland health (standards), based on the above fundamentals, are expressions of the physical and biological condition or degree of function necessary to sustain healthy rangeland ecosystems. Although the focus of these standards is on domestic livestock grazing on Bureau of Land Management lands, on-the-ground decisions must consider the effects and impacts of all uses.

Standards that address the physical components of rangeland ecosystems focus on the roles and interactions of geology and landform, soil, climate and water as they govern watershed function and soil stability. The biological components addressed in the standards focus on the roles and interactions of plants, animals and microbes (producers, consumers and decomposers), and their habitats in the ecosystem. The biological component of rangeland ecosystems is supported by physical function of the system, and it is recognized that biological activity also influences and supports many of the ecosystem's physical functions.

Guidance contained in 43 CFR 4180 of the regulations directs management toward the maintenance or restoration of the physical function and biological health of rangeland ecosystems. Focusing on the basic ecological health and function of rangelands is expected to provide for the maintenance, enhancement, or creation of future social and economic options.

The standards are based upon the ecological potential and capability of each site. In assessing a site's condition or degree of function, it must be understood that the evaluation compares each site to its own potential or capability. Potential and capability are defined as follows:

Potential-The highest level of condition or degree of function a site can attain given no political, social or economic constraints.

Capability-The highest level of condition or degree of function a site can attain given certain political, social or economic constraints. For example, these constraints might include riparian areas permanently occupied by a highway or railroad bed that prevent the stream's full access to its original flood plain. If such constraints are removed, the site may be able to move toward its potential.

In designing and implementing management strategies to meet the standards of rangeland health, the potential of the site must be identified, and any constraints recognized, in order that plan goals and objectives are realistic and physically and economically achievable.

Standards and Guidelines in Relation to the Planning Process

The standards apply to the goals of land use plans, activity plans, and project plans (Allotment Management Plans, Annual Operating Plans, Habitat Management Plans, etc.). They establish the physical and biological conditions or degree of function toward which management of publicly-owned rangeland is to be directed. In the development of a plan, direction provided by the standards and the social and economic needs expressed by local communities and individuals are brought together in formulating the goal(s) of that plan.

When the standards and the social and economic goals of the planning participants are woven together in the plan goal(s), the quantifiable, time specific objective(s) of the plan are then developed. Objectives describe and

quantify the desired future conditions to be achieved within a specified timeframe. Each plan objective should address the physical, biological, social and economic elements identified in the plan goal.

Standards apply to all ecological sites and land forms on public rangelands throughout Oregon and Washington. The standards require site-specific information for full on-ground usability. For each standard, a set of indicators is identified for use in tailoring the standards to site-specific situations. These indicators are used for rangeland ecosystem assessments and monitoring and for developing terms and conditions for permits and leases that achieve the plan goal.

Guidelines for livestock grazing management offer guidance in achieving the plan goal and objectives. The guidelines outline practices, methods, techniques and considerations used to ensure that progress is achieved in a way, and at a rate, that meets the plan goal and objectives.

Indicators of Rangeland Health

The condition or degree of function of a site in relation to the standards and its trend toward or away from any standard is determined through the use of reliable and scientifically sound indicators. The consistent application of such indicators can provide an objective view of the condition and trend of a site when used by trained observers.

For example, the amount and distribution of ground cover can be used to indicate that infiltration at the soil surface can take place as described in the standard relating to upland watershed function. In applying this indicator, the specific levels of plant cover necessary to support infiltration in a particular soil should be identified using currently available information from reference areas, if they exist; from technical sources like soil survey reports, Ecological Site Inventories, and Ecological Site Descriptions, or from other existing reference materials. Reference areas are lands that best represent the potential of a specific ecological site in both physical function and biological health. In many instances potential reference areas are identified in Ecological Site Descriptions and are referred to as “type locations.” In the absence of suitable reference areas, the selection of indicators to be used in measuring or judging condition or function should be made by an interdisciplinary team of experienced professionals and other trained individuals.

Not all indicators identified for each standard are expected to be employed in every situation. Criteria for selecting appropriate indicators and methods of measurement and observation include, but are not limited to: 1. the relationship between the attribute(s) being measured or observed and the desired outcome; 2. the relationship between the activity (e.g., livestock grazing) and the attribute(s) being measured or observed; and 3. funds and workforce available to conduct the measurements or observations.

Assessments and Monitoring

The standards are the basis for assessing and monitoring rangeland condition and trend. Carrying out well-designed assessment and monitoring is critical to restoring or maintaining healthy rangelands and determining trends and conditions.

Assessments are a cursory form of evaluation based on the standards that can be used at different landscape scales. Assessments, conducted by qualified interdisciplinary teams (which may include but are not limited to physical, biological and social specialists, and interagency personnel) with participation from permittees and other interested parties, are appropriate at the watershed and sub-watershed levels, at the allotment and pasture levels and on individual ecological sites or groups of sites. Assessments identify the condition or degree of function within the rangeland ecosystem and indicate resource problems and issues that should be monitored or studied in more detail. The results of assessments are a valuable tool for managers in assigning priorities within an administrative area and the subsequent allocation of personnel, money and time in resource monitoring and treatment. The results of assessments may also be used in making management decisions where an obvious problem exists.

Monitoring, which is the well documented and orderly collection, analysis and interpretation of resource data, serves as the basis for determining trends in the condition or degree of function of rangeland resources and for making management decisions. Monitoring should be designed and carried out to identify trends in resource conditions, to point out resource problems, to help indicate the cause of such problems, to point out solutions, and/or to contribute to adaptive management decisions. In cases where monitoring data do not exist, professional judgement, supported by interdisciplinary team recommendation, may be relied upon by the authorized officer in order to take necessary action. Review and evaluation of new information must be an ongoing activity.

To be effective, monitoring must be consistent over time, throughout administrative areas, and in the methods of measurement and observation of selected indicators. Those doing the monitoring must have the knowledge and skill required by the level or intensity of the monitoring being done, as well as the experience to properly interpret the results. Technical support for training must be made available.

Measurability

It is recognized that not every area will immediately meet the standards and that it will sometimes be a long-term process to restore some rangelands to properly functioning condition. It is intended that in cases where standards are not being met, measurable progress should be made toward achieving those standards, and significant progress should be made toward fulfilling the fundamentals of rangeland health. Measurability is defined on a case-specific basis based upon the stated planning objectives (i.e., quantifiable, time specific), taking into account economic and social goals along with the biological and ecological capability of the area. To the extent that a rate of recovery conforms with the planning objectives, the area is allowed the time to meet the standard under the selected management regime.

Implementation

The material contained in this document will be incorporated into existing Land Use Plans and used in the development of new Land Use Plans. According to 43 CFR 4130.3-1, permits and leases shall incorporate terms and conditions that ensure conformance with 43 CFR 4180. Terms and conditions of existing permits and leases will be modified to reflect standards and guidelines at the earliest possible date with priority for modification being at the discretion of the authorized officer. Terms and conditions of new permits and leases will reflect standards and guidelines in their development.

Indicators identified in this document will serve as a focus of interpretation of existing monitoring data and will provide the basis of design for monitoring and assessment techniques, and in the development of monitoring and assessment plans.

The authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining, through assessment or monitoring by experienced professionals and interdisciplinary teams, that a standard is not being achieved and that livestock are a significant contributing factor to the failure to achieve the standards and conform with the guidelines.

Standards for Rangeland Health

Standard 1 Watershed Function – Uplands

Upland soils exhibit infiltration and permeability rates, moisture storage and stability that are appropriate to soil, climate and landform.

Rationale and Intent

This standard focuses on the basic physical functions of upland soils that support plant growth, the maintenance or development of plant populations and communities, and promote dependable flows of quality water from the watershed.

To achieve and sustain rangeland health, watersheds must function properly. Watersheds consist of three principle components: the uplands, riparian/wetland areas and the aquatic zone. This standard addresses the upland component of the watershed. When functioning properly, within its potential, a watershed captures, stores and safely releases the moisture associated with normal precipitation events (equal to or less than the 25 year, 5 hour event) that falls within its boundaries. Uplands make up the largest part of the watershed and are where most of the moisture received during precipitation events is captured and stored.

While all watersheds consist of similar components and processes, each is unique in its individual makeup. Each watershed displays its own pattern of landform and soil, its unique climate and weather patterns, and its own history of use and current condition. In directing management toward achieving this standard, it is essential to treat each unit of the landscape (soil, ecological site, and watershed) according to its own capability and how it fits with both smaller and larger units of the landscape.

A set of potential indicators has been identified for which site-specific criteria will be used to determine if this standard is being met. The appropriate indicators to be used in determining attainment of the standard should be drawn from the following list.

Potential Indicators

Protection of the soil surface from raindrop impact; detention of overland flow; maintenance of infiltration and permeability, and protection of the soil surface from erosion, consistent with the potential/capability of the site, as evidenced by the:

- amount and distribution of plant cover (including forest canopy cover);
- amount and distribution of plant litter;
- accumulation/incorporation of organic matter;
- amount and distribution of bare ground;
- amount and distribution of rock, stone, and gravel;
- plant composition and community structure;
- thickness and continuity of A horizon;
- character of microrelief;
- presence and integrity of biotic crusts;
- root occupancy of the soil profile;
- biological activity (plant, animal, and insect); and
- absence of accelerated erosion and overland flow.

Soil and plant conditions promote moisture storage as evidenced by:

- amount and distribution of plant cover (including forest canopy cover);
- amount and distribution of plant litter;
- plant composition and community structure; and
- accumulation/incorporation of organic matter.

Standard 2 Watershed Function - Riparian/Wetland Areas

Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

Rationale and Intent

Riparian-wetland areas are grouped into two major categories: 1. lentic, or standing water systems such as lakes, ponds, seeps, bogs, and meadows; and 2. lotic, or moving water systems such as rivers, streams, and springs. Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Riparian areas commonly occupy the transition zone between the uplands and surface water bodies (the aquatic zone) or permanently saturated wetlands.

Properly functioning condition of riparian and wetland areas describes the degree of physical function of these components of the watershed. Their functionality is important to water quality in the capture and retention of sediment and debris, the detention and detoxification of pollutants, and in moderating seasonal extremes of water temperature. Properly functioning riparian areas and wetlands enhance the timing and duration of streamflow through dissipation of flood energy, improved bank storage, and ground water recharge. Properly functioning condition should not be confused with the Desired Plant Community (DPC) or the Desired Future Condition (DFC) since, in most cases, it is the precursor to these levels of resource condition and is required for their attainment.

A set of indicators has been identified for which site-specific criteria will be used to determine if this standard is being met. The criteria are based upon the potential (or upon the capability where potential cannot be achieved) of individual sites or land forms.

Potential Indicators

Hydrologic, vegetative, and erosional/depositional processes interact in supporting physical function, consistent with the potential or capability of the site, as evidenced by:

- frequency of floodplain/wetland inundation;
- plant composition, age class distribution, and community structure;
- root mass;
- point bars revegetating;
- streambank/shoreline stability;
- riparian area width;
- sediment deposition;
- active/stable beaver dams;
- coarse/large woody debris;
- upland watershed conditions;
- frequency/duration of soil saturation; and
- water table fluctuation.

Stream channel characteristics are appropriate for landscape position as evidenced by:

- channel width/depth ratio;
- channel sinuosity;
- gradient;
- rocks and coarse and/or large woody debris;
- overhanging banks;
- pool/riffle ratio;
- pool size and frequency; and
- stream embeddedness.

Standard 3 Ecological Processes

Healthy, productive and diverse plant and animal populations and communities appropriate to soil, climate and landform are supported by ecological processes of nutrient cycling, energy flow and the hydrologic cycle.

Rationale and Intent

This standard addresses the ecological processes of energy flow and nutrient cycling as influenced by existing and desired plant and animal communities without establishing the kinds, amounts or proportions of plant and animal community compositions. While emphasis may be on native species, an ecological site may be capable of supporting a number of different native and introduced plant and animal populations and communities while meeting this standard. This standard also addresses the hydrologic cycle which is essential for plant growth and appropriate levels of energy flow and nutrient cycling. Standards 1 and 2 address the watershed aspects of the hydrologic cycle.

With few exceptions, all life on earth is supported by the energy supplied by the sun and captured by plants in the process of photosynthesis. This energy enters the food chain when plants are consumed by insects and herbivores and passes upward through the food chain to the carnivores. Eventually, the energy reaches the decomposers and is released as the thermal output of decomposition or through oxidation.

The ability of plants to capture sunlight energy, to grow and develop, to play a role in soil development and watershed function, to provide habitat for wildlife and to support economic uses depends on the availability of nutrients and moisture. Nutrients necessary for plant growth are made available to plants through the decomposition and metabolization of organic matter by insects, bacteria and fungi, the weathering of rocks and extraction from the atmosphere. Nutrients are transported through the soil by plant uptake, leaching and by rodent, insect and microbial activity. They follow cyclical patterns as they are used and reused by living organisms.

The ability of rangelands to supply resources and satisfy social and economic needs depends on the buildup and cycling of nutrients over time. Interrupting or slowing nutrient cycling can lead to site degradation, as these lands become increasingly deficient in the nutrients plants require.

Some plant communities, because of past use, frequent fire or other histories of extreme or continued disturbance, are incapable of meeting this standard. For example, shallow-rooted winter-annual grasses that completely dominate some sites do not fully occupy the potential rooting depth of some soils, thereby reducing nutrient cycling well below optimum levels. In addition, these plants have a relatively short growth period and thus capture less sunlight than more diverse plant communities. Plant communities like those cited in this example are considered to have crossed the threshold of recovery and often require great expense to be recovered. The cost of recovery must be weighed against the site's potential ecological/economic value in establishing treatment priorities.

The role of fire in natural ecosystems should be considered, whether it acts as a primary driver or only as one of many factors. It may play a significant role in both nutrient cycling and energy flows.

A set of indicators has been identified for which site-specific criteria will be used to determine if this standard is being met.

Potential Indicators

Photosynthesis is effectively occurring throughout the potential growing season, consistent with the potential/ capability of the site, as evidenced by plant composition and community structure.

Nutrient cycling is occurring effectively, consistent with the potential/capability of the site, as evidenced by:

- plant composition and community structure;
- accumulation, distribution, incorporation of plant litter and organic matter into the soil;

- animal community structure and composition;
- root occupancy in the soil profile; and
- biological activity including plant growth, herbivory, and rodent, insect and microbial activity.

Standard 4 Water Quality

Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

Rationale and Intent

The quality of the water yielded by a watershed is determined by the physical and chemical properties of the geology and soils unique to the watershed, the prevailing climate and weather patterns, current resource conditions, the uses to which the land is put and the quality of the management of those uses. Standards 1, 2 and 3 contribute to attaining this standard.

States are legally required to establish water quality standards and Federal land management agencies are to comply with those standards. In mixed ownership watersheds, agencies, like any other land owners, have limited influence on the quality of the water yielded by the watershed. The actions taken by the agency will contribute to meeting State water quality standards during the period that water crosses agency administered holdings.

Potential Indicators

Water quality meets applicable water quality standards as evidenced by:

- water temperature;
- dissolved oxygen;
- fecal coliform;
- turbidity;
- pH;
- populations of aquatic organisms; and
- effects on beneficial uses (i.e., effects of management activities on beneficial uses as defined under the Clean Water Act and State implementing regulations).

Standard 5 Native, T&E, and Locally Important Species

Habitats support healthy, productive and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate and landform.

Rationale and Intent

Federal agencies are mandated to protect threatened and endangered species and will take appropriate action to avoid the listing of any species. This standard focuses on retaining and restoring native plant and animal (including fish) species, populations and communities (including threatened, endangered and other special status species and species of local importance). In meeting the standard, native plant communities and animal habitats would be spatially distributed across the landscape with a density and frequency of species suitable to ensure reproductive capability and sustainability. Plant populations and communities would exhibit a range of age classes necessary to sustain recruitment and mortality fluctuations.

Potential Indicators

Essential habitat elements for species, populations and communities are present and available, consistent with the potential/capability of the landscape, as evidenced by:

- plant community composition, age class distribution, productivity;
- animal community composition, productivity;
- habitat elements;
- spatial distribution of habitat;
- habitat connectivity; and
- population stability/resilience.

Guidelines for Livestock Grazing Management

Guidelines for livestock grazing management offer guidance in achieving plan goals, meeting standards for rangeland health and fulfilling the fundamentals of rangeland health. Guidelines are applied in accordance with the capabilities of the resource in consultation, cooperation, and coordination with permittees/lessees and the interested public. Guidelines enable managers to adjust grazing management on public lands to meet current and anticipated climatic and biological conditions.

General Guidelines

1. Involve diverse interests in rangeland assessment, planning and monitoring.

2. Assessment and monitoring are essential to the management of rangelands, especially in areas where resource problems exist or issues arise. Monitoring should proceed using a qualitative method of assessment to identify critical, site-specific problems or issues using interdisciplinary teams of specialists, managers, and knowledgeable land users.

Once identified, critical, site-specific problems or issues should be targeted for more intensive, quantitative monitoring or investigation. Priority for monitoring and treatment should be given to those areas that are ecologically at-risk where benefits can be maximized given existing budgets and other resources.

Livestock Grazing Management

1. The season, timing, frequency, duration and intensity of livestock grazing use should be based on the physical and biological characteristics of the site and the management unit in order to:

    a. provide adequate cover (live plants, plant litter and residue) to promote infiltration, conserve soil moisture and to maintain soil stability in upland areas;

    b. provide adequate cover and plant community structure to promote streambank stability, debris and sediment capture, and floodwater energy dissipation in riparian areas.

    c. promote soil surface conditions that support infiltration;

    d. avoid sub-surface soil compaction that retards the movement of water in the soil profile;

    e. help prevent the increase and spread of noxious weeds;

    f. maintain or restore diverse plant populations and communities that fully occupy the potential rooting volume of the soil;

    g. maintain or restore plant communities to promote photosynthesis throughout the potential growing season;

    h. promote soil and site conditions that provide the opportunity for the establishment of desirable plants;

    I. protect or restore water quality; and

    j. provide for the life cycle requirements, and maintain or restore the habitat elements of native (including T&E, special status, and locally important species) and desired plants and animals.

2. Grazing management plans should be tailored to site-specific conditions and plan objectives. Livestock grazing should be coordinated with the timing of precipitation, plant growth and plant form. Soil moisture, plant growth stage and the timing of peak stream flows are key factors in determining when to graze. Response to different grazing strategies varies with differing ecological sites.

3. Grazing management systems should consider nutritional and herd health requirements of the livestock.

4. Integrate grazing management systems into the year-round management strategy and resources of the permittee(s) or lessee(s). Consider the use of collaborative approaches (e.g., Coordinated Resource Management, Working Groups) in this integration.

5. Consider competition for forage and browse among livestock, big game animals, and wild horses in designing and implementing a grazing plan.

6. Provide periodic rest from grazing for rangeland vegetation during critical growth periods to promote plant vigor, reproduction and productivity.

7. Range improvement practices should be prioritized to promote rehabilitation and resolve grazing concerns on transitory grazing land.

8. Consider the potential for conflict between grazing use on public land and adjoining land uses in the design and implementation of a grazing management plan.

Facilitating the Management of Livestock Grazing

1. The use of practices to facilitate the implementation of grazing systems should consider the kind and class of animals managed, indigenous wildlife, wild horses, the terrain and the availability of water. Practices such as fencing, herding, water development, and the placement of salt and supplements (where authorized) are used where appropriate to:

    a. promote livestock distribution;

    b. encourage a uniform level of proper grazing use throughout the grazing unit;

    c. avoid unwanted or damaging concentrations of livestock on streambanks, in riparian areas and other sensitive areas such as highly erodible soils, unique wildlife habitats and plant communities; and

    d. protect water quality.

2. Roads and trails used to facilitate livestock grazing are constructed and maintained in a manner that minimizes the effects on landscape hydrology; concentration of overland flow, erosion and sediment transport are prevented; and subsurface flows are retained.

Accelerating Rangeland Recovery

1. Upland treatments that alter the vegetative composition of a site, like prescribed burning, juniper management and seedings or plantings must be based on the potential of the site and should:

    a. retain or promote infiltration, permeability, and soil moisture storage;

    b. contribute to nutrient cycling and energy flow;

    c. protect water quality;

d. help prevent the increase and spread of noxious weeds;

e. contribute to the diversity of plant communities, and plant community composition and structure;

f. support the conservation of T&E, other special status species and species of local importance; and

g. be followed up with grazing management and other treatments that extend the life of the treatment and address the cause of the original treatment need.

2. Seedings and plantings of non-native vegetation should only be used in those cases where native species are not available in sufficient quantities; where native species are incapable of maintaining or achieving the standards; or where non-native species are essential to the functional integrity of the site.

3. Structural and vegetative treatments and animal introductions in riparian and wetland areas must be compatible with the capability of the site, including the system's hydrologic regime, and contribute to the maintenance or restoration of properly functioning condition.

Glossary

Appropriate action-implementing actions pursuant to subparts 4110, 4120, 4130 and 4160 of the regulations that will result in significant progress toward fulfillment of the standards and significant progress toward conformance with the guidelines. (see **Significant progress**)

Assessment-a form of evaluation based on the standards of rangeland health, conducted by an interdisciplinary team at the appropriate landscape scale (pasture, allotment, sub-watershed, watershed, etc.) to determine conditions relative to standards.

Compaction layer-a layer within the soil profile in which the soil particles have been rearranged to decrease void space, thereby increasing soil bulk density and often reducing permeability.

Crust, Abiotic-(physical crust) a surface layer on soils, ranging in thickness from a few millimeters to a few centimeters, that is much more compact, hard and brittle, when dry, than the material immediately beneath it.

Crust, Biotic-(microbiotic or cryptogamic crust) a layer of living organisms (mosses, lichens, liverworts, algae, fungi, bacteria, and/or cyanobacteria) occurring on, or near the soil surface.

Degree of function-a level of physical function relative to properly functioning condition commonly expressed as: properly functioning, functioning-at-risk, or non-functional.

Diversity-the aggregate of species assemblages (communities), individual species, and the genetic variation within species and the processes by which these components interact within and among themselves. The elements of diversity are: 1. community diversity (habitat, ecosystem), 2. species diversity; and 3. genetic diversity within a species; all three of which change over time.

Energy flow-the processes in which solar energy is converted to chemical energy through photosynthesis and passed through the food chain until it is eventually dispersed through respiration and decomposition.

Ground water-water in the ground that is in the zone of saturation; water in the ground that exists at, or below the water table.

Guideline-practices, methods, techniques and considerations used to ensure that progress is made in a way and at a rate that achieves the standard(s).

Gully-a channel resulting from erosion and caused by the concentrated but intermittent flow of water usually during and immediately following heavy rains.

Hydrologic cycle-the process in which water enters the atmosphere through evaporation, transpiration, or sublimation from the oceans, other surface water bodies, or from the land and vegetation, and through condensation and precipitation returns to the earth's surface. The precipitation then occurring as overland flow, stream flow, or percolating underground flow to the oceans or other surface water bodies or to other sites of evapo-transpiration and recirculation to the atmosphere.

Indicators-parameters of ecosystem function that are observed, assessed, measured, or monitored to directly or indirectly determine attainment of a standard(s).

Infiltration-the downward entry of water into the soil.

Infiltration rate-the rate at which water enters the soil.

Nutrient cycling-the movement of essential elements and inorganic compounds between the reservoir pool (soil, for example) and the cycling pool (organisms) in the rapid exchange (i.e., moving back and forth) between organisms and their immediate environment.

Organic matter-plant and animal residues accumulated or deposited at the soil surface; the organic fraction of the soil that includes plant and animal residues at various stages of decomposition; cells and tissues of soil organisms, and the substances synthesized by the soil population.

Permeability-the ease with which gases, liquids or plant roots penetrate or pass through a bulk mass of soil or a layer of soil.

Properly functioning condition-Riparian-wetland: adequate vegetation, landform, or large (coarse) woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid in flood plain development; improve flood-water retention and ground water recharge; develop root masses that stabilize streambanks against cutting action; develop diverse channel and ponding characteristics to provide the habitat and water depth, duration and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The result of interaction among geology, soil, water, and vegetation.

Uplands: soil and plant conditions support the physical processes of infiltration and moisture storage and promote soil stability (as appropriate to site potential); includes the production of plant cover and the accumulation of plant residue that protect the soil surface from raindrop impact, moderate soil temperature in minimizing frozen soil conditions (frequency, depth, and duration), and the loss of soil moisture to evaporation; root growth and development in the support of permeability and soil aeration. The result of interaction among geology, climate, landform, soil, and organisms.

Proper grazing use-grazing that, through the control of timing, frequency, intensity and duration of use, meets the physiological needs of the desirable vegetation, provides for the establishment of desirable plants and is in accord with the physical function and stability of soil and landform (properly functioning condition).

Reference area-sites that, because of their condition and degree of function, represent the ecological potential or capability of similar sites in an area or region (ecological province); serve as a benchmark in determining the ecological potential of sites with similar soil, climatic, and landscape characteristics.

Rill-a small, intermittent water course with steep sides; usually only a few inches deep.

Riparian area-a form of wetland transition between permanently saturated wetlands and upland areas. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and stream, glacial potholes, and shores of lakes and reservoirs with stable water levels area typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil. Includes, but is not limited to, jurisdictional wetlands.

Significant progress-when used in reference to achieving a standard: (actions), the necessary land treatments, practices and/or changes to management have been applied or are in effect; (rate), a rate of progress that is consistent with the anticipated recovery rate described in plan objectives, with due recognition of the effects of climatic extremes (drought, flooding, etc.), fire, and other unforeseen naturally occurring events or disturbances. Monitoring reference areas that are ungrazed and properly grazed may provide evidence of appropriate recovery rates. (See Proper Grazing Use)

Soil density-(bulk density)-the mass of dry soil per unit bulk volume.

Soil moisture-water contained in the soil; commonly used to describe water in the soil above the water table.

Special status species-species proposed for listing, officially listed (T/E), or candidates for listing as threatened or endangered by the Secretary of the Interior under the provisions of the Endangered Species Act; those listed or proposed for listing by the State in a category implying potential endangerment or extinction; those designated by each Bureau of Land Management State Director as sensitive.

Species of local importance-species of significant importance to Native American populations (e.g., medicinal and food plants).

Standard-an expression of the physical and biological condition or degree of function necessary to sustain healthy rangeland ecosystems.

Uplands-lands that exist above the riparian/wetland area, or active flood plains of rivers and streams; those lands not influenced by the water table or by free or unbound water; commonly represented by toe slopes, alluvial fans, and side slopes, shoulders and ridges of mountains and hills.

Watershed-an area of land that contributes to the surface flow of water past a given point. The watershed dimensions are determined by the point past, or through which, runoff flows.

Watershed function-the principal functions of a watershed include the capture of moisture contributed by precipitation; the storage of moisture within the soil profile, and the release of moisture through subsurface flow, deep percolation to groundwater, evaporation from the soil, and transpiration by live vegetation.

Wetland-areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Appendix K Limits of Acceptable Change

Limits of Acceptable Change (LAC) is a process for establishing acceptable and appropriate resource and social conditions in recreation settings. LAC is based on the premise that change to the ecological and social conditions of an area will occur as a result of natural and human factors. The goal of management is to keep the character and the rate of change due to human factors within acceptable levels and consistent with desired future conditions. The primary emphasis of the LAC system is on the conditions desired rather than on how much use an area can tolerate. The management challenge is not one of how to prevent any human-induced change, but rather one of deciding what change should occur, how much change will be allowed, what management actions are needed to guide and control it, and how the managing agencies will know when the established limits are being or have been reached.

In managing the John Day River, the LAC process is designed to be the foundation for the long-term protection and enhancement of the desired future conditions for recreation that have been identified in this plan. For the most part, the desired future condition for John Day River segments identified by this plan strives to maintain the existing character of the river canyon, to preserve the existing condition of campsites and recreation sites where found to be acceptable, and to rest or close areas where conditions are found to be unacceptable.

As used on the John Day River, the LAC process involves two parts completed concurrently, which have already begun and would be continued under any alternative. The first part, involves extensive data collection on current resource and social conditions, and determining what change is acceptable while maintaining desired future conditions. Key indicators would be selected which allow future tracking of the physical or social conditions (i.e. vegetation loss within campsites, number of encounters per day with other groups). For each indicator a standard or threshold level would be set, which determines the amount of change that will be accepted. The standards then serve as “triggers” which alert managing agencies to unacceptable change.

The second part of the process involves developing a set of strategies and a range of management actions which may be implemented if and when continued monitoring of conditions indicate that one or more of the “triggers” has been or is about to be reached, resulting in a level of change that is unacceptable. A list of potential management actions designed to reverse or prevent unacceptable trends would be determined in advance, so as to be ready for implementation if and when continued monitoring efforts indicate they are needed. When needed, managers may then select the management action or combination of actions likely to bring that indicator back within acceptable levels. Management actions previously implemented to protect resource and social conditions such as group size limits and porta-potty and firepan requirements, would be continued unless modified as a result of the LAC process.

In spring of 1999, extensive data collection was begun on the current physical condition of campsites in Segments 2 and 3. For the next two years, the condition of these sites will continue to be monitored before and after each boating season, and social surveys will be conducted to collect social preference data. Simultaneous with review of the data collected, strategies for dealing with potential unacceptable conditions would be developed. Examples of potential management actions which may be considered for use on the John Day if and when LAC determines they are needed include but are not limited to staggered launch times, temporary campsite closure, a campsite reservation system, reduction in allowable party size, limitations on the number of watercraft per group, and boating use limits. If resource and social conditions do not meet the “trigger” point and management actions are not necessary at this time, a list of management actions will be ready for potential implementation in the future. The LAC process may be initiated on other river segments if future resource and social conditions become a concern, and the monitoring data collected through LAC may be used in the management of other resources.

Appendix L Allotment Summaries

The Central Oregon Field Office of the Prineville District administers 122 allotments which contain public lands which lie within either the Wild and Scenic River boundaries or within 1/4 mile of the river of the non-designated segments. This appendix summarizes the river related management and monitoring of each allotment as well as what actions would be required to implement the four alternatives on each allotment.

The allotment category is the result of a prioritization process which occurred during the Resource Management Planning process and was reviewed during the allotment evaluation process. The three categories are improve (I), which designates those allotments which contain the highest public land resource values, maintain (M) and custodial (C) which designates those allotments which contain the least public land resource values.

Miles of river bank, acres within the Wild and Scenic River boundaries and total acreage within the allotment are presented for use in determining the highest priority allotments.

Riparian management in 1988 shows an approximation of the grazing management in place at the time of designation.

NEPA documents refers to those documents prepared specifically to alter the grazing management on the allotment following designation of portions of the river.

Riparian management in 1999 shows the grazing regime which occurred in 1999 on a river bank mile basis.

Monitoring studies are included if they are on the river bank (riparian monitoring) or in a pasture which lies wholly or partially within either the Wild and Scenic River boundaries or within 1/4 mile of the river on non-designated segments of the John Day River.

Ecological Status was measured using the Soil Vegetation Inventory Method. The inventory took place in the late 1970s, the report was completed in 1980 (see discussion of Condition and Trend under Vegetation in Chapter 2). Most of the public lands covered under the Two Rivers RMP (Prineville District) were inventoried. Public lands in Grant County were administered by the Burns District of the BLM in the mid 1980s; few of those public lands were inventoried.

Special Seasonal Limitations To Grazing. The majority of the material presented in Appendix L has not changed since the Draft Environmental Impact Statement. However, in responding to public comments the grazing prescriptions for the Preferred Alternative have been further refined. In order to protect public land riparian areas, grazing in pastures with livestock access to riverbank would be limited to periods when river flows at the USGS Service Creek gauging station exceed 2,000 cubic feet per second (cfs). As noted in the description of the Preferred Alternative, for pastures grazed in winter, the flow limitation is intended to be an interim management constraint. Exceptions would be made for scattered tracts of public land. An available option for areas outside of Wilderness Study Areas is the use of a temporary electric fence which restricts livestock access to riparian areas. Further constraints, standards and remedies are described in Chapter 3, Monitoring and description of Proposed Decision.

2617 Emigrant Canyon

Location:	Segment 1	River Miles 5.6 - 13.4		
Category:	M			
AUMs within lease:	26			
Miles of river bank	private	7.2	public	0.6
Acres within WSR boundaries	private	323	public	215
Acres within allotment	private	5130	public	661
Riparian management in 1988	Season long, 3.0 rm private (below WSR designated segment) excluded			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	none			
Upland monitoring	established 23 Sept '93. Not re-measured.			
Ecological Status as measured in 1980:	climax: 55 acres late seral: 254 acres mid seral: 0 acres early seral: 327 acres unclassified: 25 acres			
Restricted grazing, necessary actions:	Construct approximately 0.7 miles of fence in sections 18, 19 and 24, rest the new, 'Upriver Pasture' for 3 years, adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	2.8	public	0.6
acres excluded	private	34	public	7
other actions				
No Grazing: miles of fence	private	0.6	public	0.1
acres excluded	private	300	public	200
public land AUMs canceled	10			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2604 Philippi

Location:	Segment 1	River Miles 9.5 - 11.0		
Category:	M			
AUMs within lease:	64			
Miles of river bank	private	1.5	public	0.0
Acres within WSR boundaries	private	155	public	42
Acres within allotment	private	2677	public	942
Riparian management in 1988	winter and spring, area subject to trespass grazing during low flows			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	none			
Upland monitoring	Trend plot (3x3 photoplot) established in 1987 and remeasured in 1990. Monitoring shows an increase in perennial bunchgrass.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 193 acres mid seral: 184 acres early seral: 608 acres unclassified: 37 acres			
Restricted grazing, necessary actions:	adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.0	public	0.7
acres excluded	private	0	public	40
public land AUMs canceled	1			
Other actions				

2648 Hartung

Location:	Segment 1	River Miles 13.4 - 15.8 and 17.2 - 18.4		
Category:	I			
AUMs within lease:	16			
Miles of river bank	private	2.9	public	0.7
Acres within WSR boundaries	private	308	public	243
Acres within allotment	private	1201	public	700
Riparian management in 1988	spring and summer			
NEPA documents	96-009			
Riparian management in 1999	voluntary non-use by permittee. NEPA analysis has been completed for river fencing and rotation grazing, decision has not been issued.			
Riparian monitoring	Photo point at river mile 15 established in 1998.			
Upland monitoring	Upland trend (Daubenmire) established in 1987 and remeasured in 1992 and 1998. Grazing has occurred regularly through the critical growing season, monitoring shows an increase in *Gutierrezia sarothrae*.			
	Upland trend (Daubenmire) established in 1987 and remeasured in 1993. Same grazing as above, monitoring shows an increase in *Stipa comata*.			
Ecological Status as measured in 1980:	climax: 43 acres			
	late seral: 183 acres			
	mid seral: 164 acres			
	early seral: 150 acres			
	unclassified: 0 acres			
Restricted grazing, necessary actions:	adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	2.9	public	0.7
acres excluded	private	35	public	8
other actions				
No Grazing: miles of fence	private	0.0	public	3.7
acres excluded	private	40	public	560
public land AUMs canceled	13			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2594 Morehouse and Elliot

Location:	Segment 1	River Miles 15.8 - 17.2		
Category:	M			
AUMs within lease:	3			
Miles of river bank	private	0.4	public	1.0
Acres within WSR boundaries	private	109	public	62
Acres within allotment	private	169	public	65
Riparian management in 1988	spring and summer.			
NEPA documents	96-009			
Riparian management in 1999	voluntary non-use by permittee. NEPA analysis has been completed for exclusion of allotment, decision has not been issued.			
Riparian monitoring	Photo point at river mile 17 established in 1987, re-measured in 1992 and 1998. Under spring and summer grazing, a decrease in rush and willow, an increase in thistle and possibly a widening of the flood plain has occurred.			
Upland monitoring	Upland plot (Daubenmire) established in 1987 and remeasured in 1992 and 1998. Spring and summer grazing, monitoring shows a loss of perennial bunchgrass and an increase in *Gutierrezia sarothrae*.			
Ecological Status as measured in 1980:	climax: 5 acres late seral: 22 acres mid seral: 20 acres early seral: 18 acres unclassified: 0 acres			
Restricted grazing, necessary actions:	adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	0.4	public	1.0
acres excluded	private	5	public	12
other actions				
No Grazing: miles of fence	private	0.5	public	0.3
acres excluded	private	200	public	65
public land AUMs cancelled	3			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2555 Hoag

Location:	Segment 1	River Miles 16.0 - 17.3		
Category:	not available			
AUMs within lease:	not available			
Miles of river bank	private	0.3	public	1.0
Acres within WSR boundaries	private	118	public	213
Acres within allotment	private	786	public	364
Riparian management in 1988	unleased, grazed during low flows by trespass livestock			
NEPA documents	none			
Riparian management in 1999	unleased, trespass resolved			
Riparian monitoring	none			
Upland monitoring	none			

Restricted grazing, necessary actions:	adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.				
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
other actions					
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
public land AUMs canceled					
Other actions					

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2562 J Bar S

Location:	Segment 1	River Miles Left 18.4 - 18.9; Right 18.5 - 18.9		
Category:	I			
AUMs within lease:	4			
Miles of river bank	private	0.0	public	0.9
Acres within WSR boundaries	private	0	public	115
Acres within allotment	private	1311	public	115
Riparian management in 1988	0.5 miles exclusion, season long on 0.4 miles.			
NEPA documents	96-009			
Riparian management in 1999	0.5 miles exclusion, voluntary winter or spring use by permittee. NEPA analysis has been completed for rotation grazing of uplands and spring grazing on riparian area not excluded with fence, decision not issued.			
Riparian monitoring	Photo point at river mile 18.5 established in 1987 and remeasured in 1989, 1992 and 1998. Cattle were excluded with a fence since early 1980s, monitoring shows no obvious change.			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 9 acres late seral: 39 acres mid seral: 35 acres early seral: 32 acres unclassified: 0 acres			
Restricted grazing, necessary actions:	exclusion, winter and spring. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	0.0	public	0.4
acres excluded	private	0	public	11
other actions				
No Grazing: miles of fence	private	0.0	public	1.0
acres excluded	private	0	public	120
public land AUMs canceled	4			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2513 Big Sky

Location:	Segment 1	River Miles		Right 17.3 - 18.5 and 18.9 - 20.4
Category:	M			Left 18.9 - 22.8
AUMs within lease:	60			
Miles of river bank	private	5.4	public	1.2
Acres within WSR boundaries	private	953	public	454
Acres within allotment	private	8425	public	1215
Riparian management in 1988	season long			
NEPA documents	93-067, 96-009			
Riparian management in 1999	exclusion of 0.5 miles of river bank of public and 3.3 river bank miles of private, voluntary winter or spring use by permittee on 0.7 river bank miles of public and 2.1 river bank miles of private.			
Riparian monitoring	Photo point on tributary was established in 1995 and remeasured in 1998. Exclosure fence was constructed in 1995, monitoring shows increased herbaceous vegetation.			
Upland monitoring	Upland trend (Daubenmire) established in the Creek Pasture in 1987 and remeasured in 1992 and 1998. Critical growing season or fall grazing, monitoring shows a decrease in perennial bunchgrasses in 1992 and an increase in *Gutierrezia sarothrae* in 1998.			
Ecological Status as measured in 1980:	climax: 63 acres late seral: 439 acres mid seral: 464 acres early seral: 204 acres unclassified: 45 acres			
Restricted grazing, necessary actions:	exclusion, spring, winter. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	2.1	public	0.7
acres excluded	private	12	public	3
other actions				
No Grazing: miles of fence	private	0.0	public	3.3
acres excluded	private	580	public	680
public land AUMs canceled	30			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2540 Persimmon Woods

Location:	Segment 1	River Miles 22.8 - 23.9		
Category:	C			
AUMs within lease:	5			
Miles of river bank	private	1.1	public	0.0
Acres within WSR boundaries	private	295	public	0
Acres within allotment	private	2209	public	40
Riparian management in 1988	unleased, grazed during low flows by trespass livestock			
NEPA documents	none			
Riparian management in 1999	unleased, trespass resolved			
Riparian monitoring	none			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 3 acres late seral: 14 acres mid seral: 12 acres early seral: 11 acres unclassified: 0 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMs canceled				
Other actions				

2637 V.O. West

Location:	Segment 1	River Miles 20.4 - 22.1		
Category:	M			
AUMs within lease:	15			
Miles of river bank	private	1.4	public	0.3
Acres within WSR boundaries	private	183	public	193
Acres within allotment	private	3150	public	223
Riparian management in 1988	winter grazing occurred on the allotment with riparian areas subject to grazing by trespass livestock during low flows.			
NEPA documents	none			
Riparian management in 1999	exclusion on 1.0 miles of private, winter grazing on 0.3 miles of public and 0.4 miles of private.			
Riparian monitoring	none			
Upland monitoring	Upland trend (3x3 Photo point) established in 1987 and remeasured in 1992. Grazing occurred every other winter, no change was obvious.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 67 acres mid seral: 23 acres early seral: 124 acres unclassified: 9 acres			
Restricted grazing, necessary actions:	exclusion, winter and spring. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	0.4	public	0.3
acres excluded	private	2	public	2
other actions				
No Grazing: miles of fence	private	0.0	public	0.5
acres excluded	private	30	public	160
public land AUMs canceled	12			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2595 Morris

Location:	Segment 1	River Miles 22.1 - 26.6		
Category:	I			
AUMs within lease:	53			
Miles of river bank	private	3.0	public	1.5
Acres within WSR boundaries	private	82	public	396
Acres within allotment	private	996	public	833
Riparian management in 1988	spring use with some trespass grazing during low river flows.			
NEPA documents	none			
Riparian management in 1999	exclusion on 0.2 miles public and 1.6 miles of private, spring use on 1.3 miles of public and 1.4 miles of private, grazing ends before the critical growing season.			
Riparian monitoring	Photo point was established on river mile 22 in 1987 and not remeasured.			
Upland monitoring	Trend plot (3x3 Photo point) was established in 1987 and remeasured in 1992. Grazing occurred in the critical growing season, monitoring showed no obvious change. Trend plot (3x3 Photo point) was established in 1987 and remeasured in 1992. Grazing occurred in the critical growing season, monitoring showed a decrease in perennial bunchgrasses.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 80 acres mid seral: 141 acres early seral: 581 acres unclassified: 31 acres			
Restricted grazing, necessary actions:	Construct 0.7 miles of fence on public land in section 14. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	1.4	public	1.3
acres excluded	private	8	public	8
other actions				
No Grazing: miles of fence	private	0.5	public	0.7
acres excluded	private	100	public	440
public land AUMs canceled	14			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2560 Baseline

Location:	Segment 1	River Miles 23.9 - 28.5		
Category:	M			
AUMs within lease:	30			
Miles of river bank	private	3.0	public	1.6
Acres within WSR boundaries	private	520	public	220
Acres within allotment	private	3255	public	598
Riparian management in 1988	spring and early summer			
NEPA documents	none			
Riparian management in 1999	exclusion of 1.2 miles of private land, spring and early summer grazing on 1.2 miles of public and 0.4 miles of private and non-use on 0.4 miles of public and 1.4 miles of private.			
Riparian monitoring	Photo point at river mile 26 was established in 1987 and remeasured in 1988 and 1993. Grazing occurred into July, no change was obvious.			
Upland monitoring	Trend plot (Daubenmire) was established in 1987 and remeasured in 1993. After deferred grazing, monitoring shows a decrease in rhizomatous grass.			
Ecological Status as measured in 1980:	climax: 17 acres late seral: 121 acres mid seral: 145 acres early seral: 293 acres unclassified: 22 acres			
Restricted grazing, necessary actions:	exclusion. Build 0.7 miles of fence on public land, 0.4 miles of fence on private land in sections 25, 30 and 31. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	0.4	public	0.7
acres excluded	private	3	public	9
other actions				
No Grazing: miles of fence	private	0.0	public	0.5
acres excluded	private	20	public	160
public land AUMs canceled	5			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2598 Hay Creek

Location:	Segment 1	River Miles		Right 29.0 - 30.8 and 31.1 - 31.5
Category:	I			Left 28.9 - 31.5
AUMs within lease:	126			
Miles of river bank	private	3.1	public	1.7
Acres within WSR boundaries	private	354	public	295
Acres within allotment	private	2418	public	1518
Riparian management in 1988	season long			
NEPA documents	95-080			
Riparian management in 1999	exclusion of 0.2 miles of public land and 1.0 miles of private land, winter and early spring grazing on 0.8 river bank miles of public and 0.2 miles of private, summer grazing on 0.7 miles of public and 1.9 miles of private river bank.			
Riparian monitoring	Photo point at river mile 29 was established in 1987 and remeasured in 1989 and 1995. Pasture was grazed season long, is now grazed in winter, monitoring shows increased herbaceous vegetation, increased vigor in alder and recruitment of cottonwood.			
Upland monitoring	Trend plot (Daubenmire) in North Pasture was established in 1987 and remeasured in 1995. Pasture was grazed in summer and winter, now it is grazed in winter and early spring, monitoring shows an increase in *Sporobolus cryptandrus*.			
Ecological Status as measured in 1980:	climax: 122 acres late seral: 514 acres mid seral: 460 acres early seral: 422 acres unclassified: 0 acres			
Restricted grazing, necessary actions:	same as existing, pursue opportunities to exchange lands on Sherman county riparian areas for lands elsewhere in the WSR boundary.			
No Riparian Grazing miles of fence	private	1.6	public	1.2
acres excluded	private	10	public	7
other actions				
No Grazing: miles of fence	private	0.0	public	2.5
acres excluded	private	80	public	320
public land AUMs canceled	8			
Other actions	approximately 60 acres of public land in Sherman county could be traded for private lands elsewhere in the WSR boundary, eliminating the need for 0.8 miles of fence.			

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2520 Smith Point

Location:	Segment 1	River Miles 30.8 - 31.1, 31.5 - 34.1		
Category:	I			
AUMs within lease:	93			
Miles of river bank	private	1.5	public	4.0
Acres within WSR boundaries	private	200	public	1481
Acres within allotment	private	200	public	2596
Riparian management in 1988	season long			
NEPA documents	89-058, 90-005, 98-100			
Riparian management in 1999	exclusion on 1.0 miles of private river bank, 2.7 miles of public river bank, spring grazing on 0.5 miles of private and 1.3 miles of public. Decision to exclude the remainder has been issued but not implemented.			
Riparian monitoring	Photo point at river mile 33 established in 1987 and remeasured in 1988, 1992 and 1998. Spring and fall grazing, monitoring shows increase in rushes after 1988. No grazing after 1993, monitoring shows a further increase in rushes.			
Upland monitoring	Trend plot (Daubenmire) in Con Pasture established in 1987 and remeasured in 1992 and 1998. Grazed in growing season in '88, rested for 3 years and grazed in growing season in '92, monitoring shows a loss of *Agropyron cristatum* and *Sitanion hystrix*. Rested from autumn 1993 to 1998, monitoring shows a loss of *Agropyron cristatum*, *Poa sandbergii* and *Gutierrezia sarothrae* and an increase in annuals, *Chrysothamnus sp.* and *Agropyron smithii*. Trend plot (Daubenmire) in Gilliam Pasture established in 1987 and remeasured in 1993 and 1998. Rested in 1988 and 1991, grazed during growing season in 1989 and 1990 and grazed during summer in 1992, monitoring shows an increase in *Stipa thurberiana* and *Eriogonum sp.* Rested after 1993, monitoring shows an increase in knapweed and no change in bunchgrasses.			
Ecological Status as measured in 1980:	climax: 552 acres late seral: 999 acres mid seral: 0 acres early seral: 949 acres unclassified: 96 acres			
Restricted grazing, necessary actions:	same as existing, construction of 1.8 miles of fence (0.5 miles on private, 1.3 miles on public). Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	200	public	2596
public land AUMs canceled	93			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2597 J.T. Murtha

Location:	Segment 1	River Miles 34.1 - 39.7		
Category:	I			
AUMs within lease:	269			
Miles of river bank	private	7.0	public	4.2
Acres within WSR boundaries	private	800	public	1228
Acres within allotment	private	5333	public	4510
Riparian management in 1988	season long			
NEPA documents	99-117			
Riparian management in 1999	exclusion of 0.6 miles of private land, rotation grazing (alternating rest and season long)			
Riparian monitoring	none			
Upland monitoring	Trend plot (3x3 photoplot) in the Esau Canyon Pasture was established in 1987 and remeasured in 1992. The plot contained no perennial plants, no change is obvious.			
Ecological Status as measured in 1980:	climax: 981 acres late seral: 3407 acres mid seral: 2092 acres early seral: 825 acres unclassified: 280 acres			
Restricted grazing, necessary actions:	exclusion of 0.6 miles of private, rotation (alternating winter - spring grazing with rest). Construct 4.5 miles of fence, splitting Esau Canyon Pasture and implement rotation grazing schedule in uplands (according to EA #99-117). Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	6.3	public	2.8
acres excluded	private	80	public	36
other actions				
No Grazing: miles of fence	private	1.8	public	1.0
acres excluded	private	1680	public	3560
public land AUMs canceled	99			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2597 J.T. Murtha

Location:	Segment 2	River Miles		Right 39.7 - 50.1, Left 39.7 - 40.9,
Category:	I			41.0 - 45.9, 46.1 - 48.6, 48.7 - 50.1
AUMs within lease:	same as above			
Miles of river bank	private	3.5	public	16.9
Acres within WSR boundaries	private	938	public	2748
Acres within allotment	private	1913	public	3596
Riparian management in 1988	season long			
NEPA documents	99-117			
Riparian management in 1999	rotation (alternating rest with spring - winter grazing) on public land, season long on irrigated private			
Riparian monitoring	Photo point at river mile 44, established in 1987 was remeasured in 1989, 1992 and 1997. No change is obvious. Photo point at river mile 43, established in 1987 was remeasured in 1992. The view of the riparian zone is a long distance view, but there appears to be an increase in sedges and rushes. Willow Report shows an increase in willow communities from 0 river miles in 1981 to 0.71 river miles in 1995.			
Upland monitoring	Trend plot (frequency) in the Billiard Pasture was established in 1987 and remeasured in 1992. Under the two pasture rotation system *Artemisia tridentata* and *Gutierrezia sarothrae* declined, percent bare ground decreased and microbiotic crusts increased. Perennial bunchgrasses were stable. Trend plot (3x3 photoplot) in the Saddle Pasture was established in 1987, lost and had to be re-established in 1992. There appears to be a loss in *Artemisia tridentata* and a decrease in *Agropyron spicatum* under the two pasture rotation system. Trend plot (Daubenmire) in Devils Pasture was established in 1987, lost and re-established in 1998. There appears to be a decrease in sagebrush and an increase in *Eriogonum sp.* and *Psoralea lanceolata*.			
Ecological Status as measured in 1980:	described in segment 1			
Restricted grazing, necessary actions:	Exclude camp sites on river left 43.6 - 45.5 with 2 miles of fence. Implement rotation grazing system (alternating rest with spring - winter grazing for public and unfenced private lands in segment). Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	3.3	public	6.7
acres excluded	private	39	public	83
other actions				
No Grazing: miles of fence	private	3.0	public	0.0
acres excluded	private	520	public	3800
public land AUMs canceled	125			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2636 George Weedman

Location:	Segment 2	River Miles 40.9 -41.0		
Category:	C			
AUMs within lease:	6			
Miles of river bank	private	0.0	public	0.1
Acres within WSR boundaries	private	0	public	51
Acres within allotment	private	2910	public	343
Riparian management in 1988	non-use by permittee, fenced in with 2597			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	none			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid seral: 159 acres early seral: 171 acres unclassified: 13 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 1 to May 1 period.			
No Riparian Grazing miles of fence	private	0.0	public	0.1
acres excluded	private	0	public	1
other actions				
No Grazing: miles of fence	private	0.0	public	1.3
acres excluded	private	0	public	100
public land AUMs canceled	1			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2553 Willow Spring

Location:	Segment 2	River Miles 45.9 -46.1, 48.6 - 48.7		
Category:	I			
AUMs within lease:	20			
Miles of river bank	private	0.0	public	0.3
Acres within WSR boundaries	private	0	public	227
Acres within allotment	private	560	public	1127
Riparian management in 1988	non-use by permittee, fenced in with 2597			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	Willow Report shows an increase in willow communities from 0 river miles in 1981 to 0.07 river miles in 1995.			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 301 acres late seral: 0 acres mid seral: 401 acres early seral: 384 acres unclassified: 41 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 1 to May 1 period.			
No Riparian Grazing miles of fence	private	0.0	public	0.3
acres excluded	private	0	public	2
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	560	public	1127
public land AUMs canceled	20			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2591 Miller

Location:	Segment 2	River Miles 50.1 - 54.8		
Category:	I			
AUMs within lease:	47			
Miles of river bank	private	0.7	public	4.0
Acres within WSR boundaries	private	42	public	812
Acres within allotment	private	1964	public	1896
Riparian management in 1988	season long			
NEPA documents	99-080			
Riparian management in 1999	voluntary spring use changing to permanent spring use with implementation of latest decision. Decision requires construction of 1.3 miles of fence to create a riparian pasture.			
Riparian monitoring	Photo point at river mile 51, established in 1987 was remeasured in 1988, 1989, 1990, 1994, 1996 and 1998. The photos show growth of a Russian olive, loss of an alder seedling and sagebrush. Photo point at river mile 53, established in 1991 was remeasured in 1994 and 1996. Number and size of willow have increased. Willow Report shows an increase in willow communities from 0 river miles in 1981 to 0.76 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) in the Deep Canyon Pasture was established in 1987 and remeasured in 1990, 1994 and 1998. The area was burned by wildfire in 1994 and rested in 1995 and 1996. *Artemisia sp.* decreased and *Eriogonum sp.* has increased since 1994. Perennial grasses have increased since 1987.			
Ecological Status as measured in 1980:	climax: 171 acres late seral: 731 acres mid seral: 741 acres early seral: 162 acres unclassified: 70 acres			
Restricted grazing, necessary actions:	construction of 1.3 miles of fence in sections 14 and 23. Rest the riparian pasture for three years, then adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 1 to May 1 period.			
No Riparian Grazing miles of fence	private	0.7	public	4.3
acres excluded	private	4	public	26
other actions				
No Grazing: miles of fence	private	0.0	public	1.3
acres excluded	private	420	public	1780
public land AUMs canceled	42			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2509 Belshe

Location:	Segment 2	River Miles 54.8 - 56.3		
Category:	I			
AUMs within lease:	62			
Miles of river bank	private	0.0	public	1.5
Acres within WSR boundaries	private	0	public	411
Acres within allotment	private	1080	public	1840
Riparian management in 1988	spring and early summer, riparian zone subject to trespass during low flows.			
NEPA documents	97-137			
Riparian management in 1999	spring			
Riparian monitoring	Photo point established on river mile 55 in 1987 and remeasured in 1988, 1990, 1994 and 1996. No change is obvious. Coverboard plots on planted willow in Little Ferry Canyon were established in spring 1995 and remeasured in the fall 1995, showing willow survival and growth during rest following fire in 1994. Willow Report shows no change in the extent of willow communities within the allotment between 1981 and 1995.			
Upland monitoring	Trend plot (Daubenmire) in the Indian Cove pasture was established in 1987 and remeasured in 1990 and 1994. No change is obvious. Trend plot (3x3 photoplot) in the Indian Cove pasture was established in 1987 and remeasured in 1990. An increase in perennial bunchgrass occurred under spring and early summer grazing.			
Ecological Status as measured in 1980:	climax: 1246 acres late seral: 166 acres mid seral: 103 acres early seral: 257 acres unclassified: 68 acres			
Restricted grazing, necessary actions:	Construct 1.0 miles fence in section 23 and 26, rest mouth of Little Ferry and the Gooseneck for three years. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 1 to May 1 period.			
No Riparian Grazing miles of fence	private	0.0	public	1.5
acres excluded	private	0	public	9
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	160	public	1440
public land AUMs canceled	48			
Other actions	1040 acres (22 AUMs) of the Dipping Vat allotment, fenced in with the Belshe allotment, would also have to be canceled.			

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2572 Laffoon and Carlson

Location:	Segment 2	River Miles 56.3 - 64.7		
Category:	I			
AUMs within lease:	85			
Miles of river bank	private	0.0	public	8.4
Acres within WSR boundaries	private	45	public	1446
Acres within allotment	private	1652	public	3655
Riparian management in 1988	season long			
NEPA documents	94-078, 96-024, 96-058			
Riparian management in 1999	voluntary non-use taken by permittee on 5.4 miles, exclusion of 0.7 miles and spring use on 2.3 miles.			
Riparian monitoring	Photo point at river mile 57, established in 1987 and remeasured in 1988, 1990, 1994, 1996 and 1998. Spring grazing was implemented in 1996, no change is obvious. Photo point at river mile 61 was established in 1994 and remeasured in 1995. No change is obvious. Willow Report shows an increase in willow communities from 0 river miles in 1981 to 0.44 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) in Middle pasture was established in 1987 and remeasured in 1990, 1994 and 1998. Perennial bunchgrasses decreased and dalmation toadflax increased.			
Ecological Status as measured in 1980:	climax: 2266 acres late seral: 45 acres mid seral: 368 acres early seral: 841 acres unclassified: 135 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	0.0	public	7.5
acres excluded	private	0	public	56
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	120	public	3095
public land AUMs canceled	50			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2522 James Brown

Location:	Segment 2	River Miles 64.7 - 71.8		
Category:	I			
AUMs within lease:	66			
Miles of river bank	private	1.4	public	5.7
Acres within WSR boundaries	private	152	public	1202
Acres within allotment	private	1968	public	2527
Riparian management in 1988	season long			
NEPA documents	96-058			
Riparian management in 1999	exclusion of 2.1 river miles public, spring grazing on remainder.			
Riparian monitoring	Photo point at river mile 67, established in 1987 and remeasured in 1988, 1990, 1994, 1996 and 1998. Season long grazing until 1995, then spring grazing, no change is obvious. Willow Report shows an increase in willow communities from 0 river miles in 1981 to 0.12 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) established in South pasture in 1987 and remeasured in 1990, 1994, and 1998. With season long grazing there's been a steady increase in *Stipa comata* and *Gutierrezia sarothrae*, *Eriogonum sp.* has been stable. Trend plot (Daubenmire) established in North pasture in 1995 has not been remeasured.			
Ecological Status as measured in 1980:	climax: 540 acres late seral: 1060 acres mid seral: 457 acres early seral: 377 acres unclassified: 93 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally the March 1 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	0.5	public	6.5
acres excluded	private	3	public	39
other actions				
No Grazing: miles of fence	private	0.3	public	0.0
acres excluded	private	680	public	2200
public land AUMs canceled	24			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2521 Horseshoe Bend

Location:	Segment 2	River Miles 73.0 - 76.0		
Category:	I			
AUMs within lease:	43			
Miles of river bank	private	1.2	public	1.8
Acres within WSR boundaries	private	145	public	260
Acres within allotment	private	1471	public	737
Riparian management in 1988	rest with some spring and early summer use beginning in 1990, riparian zone subject to trespass during low flows.			
NEPA documents	97-062			
Riparian management in 1999	spring			
Riparian monitoring	Photo point on river mile 75 established in 1987 and remeasured in 1988, 1990 and 1996. No change obvious. Willow Report shows an increase in willow communities from 0 river miles in 1981 to 0.03 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) in River pasture established in 1987 and remeasured in 1990, lost and re-established in 1996. Perennial bunchgrass decreased to 1990 and increased to 1996.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 80 acres mid seral: 630 acres early seral: 0 acres unclassified: 27 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 1 to May 1 period.			
No Riparian Grazing miles of fence	private	1.0	public	1.5
acres excluded	private	6	public	9
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	140	public	380
public land AUMs canceled	10			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2538 Decker

Location:	Segment 2	River Miles 71.8 - 73.0, 76.0 - 80.8		
Category:	I			
AUMs within lease:	206			
Miles of river bank	private	0.4	public	5.6
Acres within WSR boundaries	private	9	public	1063
Acres within allotment	private	1823	public	2999
Riparian management in 1988	spring and early summer, riparian area subject to trespass during low flows.			
NEPA documents	97-038			
Riparian management in 1999	spring, planning and decision for 0.2 miles of fence (excluding of 1.1 river bank miles) has been issued but not implemented.			
Riparian monitoring	Photo point on river mile 76, established in 1987 and remeasured in 1988, 1990, 1994, 1996 and 1998. Photos show a widening of the river channel. Willow Report shows an increase in willow communities from 0 river miles in 1981 to 0.31 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) in Chisholm pasture was established in 1987 and remeasured in 1990, 1994 and 1998. Dalmation toadflax and perennial bunchgrasses increased. Trend plot (Daubenmire) in Middle pasture was established in 1995 and no remeasured.			
Ecological Status as measured in 1980:	climax: 146 acres late seral: 2153 acres mid seral: 249 acres early seral: 339 acres unclassified: 112 acres			
Restricted grazing, necessary actions:	construct 0.2 miles of fence (see EA#97-038). Exclude campsites in Chisholm Canyon pasture with 0.5 miles of fence. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally the March 1 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	0.4	public	5.6
acres excluded	private	2	public	33
other actions				
No Grazing: miles of fence	private	1.0	public	0.0
acres excluded	private	0	public	2000
public land AUMs canceled	93			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2619 Sid Seale

Location:	Segment 2	River Miles 50.1 - 83.7		
Category:	I			
AUMs within lease:	733			
Miles of river bank	private	2.5	public	31.1
Acres within WSR boundaries	private	157	public	5980
Acres within allotment	private	25,303	public	13,676

Riparian management in 1988: fences stopped grazing by permittee on 18.8 miles of river bank, but many of those riparian areas were subject to trespass during low flows. Season long grazing of 15.1 miles of river bank by permittee.

NEPA documents: 95-008

Riparian management in 1999: rest or exclusion of 20.3 miles of river bank, spring or winter grazing of 13.3 miles of river bank. Decision for a 0.2 mile fence, excluding another 3.2 river bank miles, was issued but not implemented.

Riparian monitoring: Photo point at river mile 76, established in 1987 and remeasured in 1988, 1990, 1994 and 1996. Pasture was grazed season long, is now grazed only in the winter or spring, monitoring shows an increase in willow after 1990.

Photo point at river mile 69, established in 1991 and remeasured in 1994, and 1996. Cattle were excluded with a fence since 1950s, the monitoring shows no obvious change.

Photo point at river mile 61, established in 1987 and remeasured in 1988, 1989, 1990, 1994, and 1996. Cattle were summer grazed until 1991, then excluded from pasture, monitoring shows an increase in willow.

Photo point at river mile 53, established in 1991 and remeasured in 1994 and 1996. Trespass grazing occurred during summer low flows, the area now receives non-use, monitoring shows an increase in willow and rushes.

Photo point at river mile 80, established in 1995 and remeasured in 1998. Pasture was grazed season long, is now grazed only in the winter or spring, monitoring shows an increase in willow.

Willow Report: shows an increase in willow communities from 0 river miles in 1981 to 3.2 river miles in 1995.

Upland monitoring: Trend plot (frequency) in Buckskin Pasture was established in 1987 and remeasured in 1990 and 1995. Grazing is a deferred treatment, monitoring shows an increase in *Stipa thurberiana*.

Trend plot (3x3 photoplot) in Owens Basin was established in 1987 and remeasured in 1990 and 1994. Grazing occurred during critical growing season until 1992, then rested, monitoring shows an increase in perennial grass after 1990.

Trend plot (Daubenmire) in Beef Hollow Pasture was established in 1987 and remeasured in 1990, 1991, and 1994. Grazing was season long, is now grazed only in the spring or winter and was burned in 1988 and in 1992. There is no discernable change.

Trend plot (Daubenmire) in Shellrock Pasture was established in 1987 and Remeasured in 1990, 1991, and 1994. Grazing was a deferred treatment until 1991 and has since been rested, monitoring shows an increase in perennial grass.

Trend plot (Daubenmire) in Fern Hollow Pasture was established in 1991 and remeasured in 1994. Grazing occurred in summer or fall, monitoring shows an increase in *Gutierrezia sarothrae* and perennial grasses.

Trend plot (Daubenmire) at Gooseneck was established in 1991 and remeasured in 1994. Trespass grazing occurred in the summer, the area now receives non-use, monitoring shows a decrease in *Stipa comata* and *Eriogonum* and an increase in *Sitanion hystrix*.

Ecological Status as measured in 1980:	climax: 3362 acres late seral: 4864 acres mid seral: 1900 acres early seral: 2006 acres unclassified: 465 acres				
Restricted grazing, necessary actions:	construct 0.2 miles of fence (see EA#95-008). Construct 0.7 miles fence to exclude Cordwood camp, prohibit grazing in Hoot Owl camp. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosures.				
No Riparian Grazing miles of fence	private	0.8	public	6.8	
acres excluded	private	4	public	36	
other actions					
No Grazing: miles of fence	private	4.4	public	3.9	
acres excluded	private	2430	public	11,916	
public land AUMs canceled	545				
Other actions					

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2608 Rattray

Location:	Segment 2	River Miles		Right 83.7 - 93.5
Category:	I			Left 83.7 - 91.9
AUMs within lease:	534			
Miles of river bank	private	2.3	public	15.7
Acres within WSR boundaries	private	208	public	2496
Acres within allotment	private	16,716	public	7982
Riparian management in 1988	season long			
NEPA documents	93-037, 96-110			
Riparian management in 1999	exclusion on 1.2 miles of private and 4.5 miles of public, winter use on 0.8 miles of private and 7.7 miles of public, rotation (spring and non-use) on 3.8 miles of public.			
Riparian monitoring	Photo point on river mile 86 established in 1987 and remeasured in 1988, 1989, 1990, 1993 and 1994. Management was season long, changed to a rotation of spring and non-use in 1999. No change is obvious. Photo point on river mile 92 established in 1987 and remeasured in 1988, 1990, and 1994. Management was non-use or winter use. No change is obvious. Photo point on river mile 88, established in 1987 and remeasured in 1988, 1990, and 1994. Management was season long, changed to spring in 1997. No change is obvious. Willow Report: shows an increase in willow communities from 0 river miles in 1981 to 0.18 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) in Horse Mountain pasture was established in 1987 and remeasured in 1994. Management was non-use or winter use. *Sporobolus cryptandrus* appears to have increased in vigor. Trend plot (3x3 photoplot) in Devils Pasture was established in 1987, lost and re-established in 1990. Trend plot (Daubenmire) in Pine Hollow pasture was established in 1987, re-established in 1990 and remeasured in 1991 and 1994. Management was spring or late summer, changed to winter or spring in 1997. Monitoring shows an increase in perennial grasses and sedges.			
Ecological Status as measured in 1980:	climax: 209 acres late seral: 3134 acres mid seral: 3458 acres early seral: 1361 acres unclassified: 272 acres			
Restricted grazing, necessary actions:	Implement 5 years rest in Pine Hollow Pasture. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence	private	0.4	public	7.1
acres excluded	private	2	public	43
other actions	cancel grazing in the Pete Enyart riparian pasture, 9 AUMs.			
No Grazing: miles of fence	private	2.8	public	0.0
acres excluded	private	165	public	3720
public land AUMs canceled	148			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2629 Tatum

Location:	Segment 2	River Miles 80.8 - 82.9		
Category:	I			
AUMs within lease:	113			
Miles of river bank	private	0.0	public	2.1
Acres within WSR boundaries	private	0	public	422
Acres within allotment	private	3242	public	2889
Riparian management in 1988	non-use by permittee, riparian areas subject to trespass grazing during low river flows.			
NEPA documents	none			
Riparian management in 1999	spring			
Riparian monitoring	Photo point on river mile 82, established in 1988 and remeasured in 1990, 1994 and 1997. Non-use from 1988 to 1992, then spring grazing. No change is obvious. Willow Report: shows an increase in willow communities from 0 river miles in 1981 to 0.02 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) in River Pasture B was established in 1987 and remeasured in 1990, 1991 and 1994. No use until 1992, then spring grazing. No change is obvious.			
Ecological Status as measured in 1980:	climax: 532 acres late seral: 1281 acres mid seral: 458 acres early seral: 511 acres unclassified: 107 acres			
Restricted grazing, necessary actions:	Exclude livestock from campsites by cancelling grazing in River 'B' pasture. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 1 to May 1 period.			
No Riparian Grazing miles of fence	private	0.0	public	2.1
acres excluded	private	0	public	13
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	160	public	1240
public land AUMs canceled	45			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2518 Pine Creek

Location:	Segment 2	River Miles 82.9 - 83.6 and 91.9 - 92.9		
Category:	I			
AUMs within lease:	346			
Miles of river bank	private	1.	public	0.7
Acres within WSR boundaries	private	171	public	454
Acres within allotment	private	10,960	public	5418
Riparian management in 1988	season long			
NEPA documents	93-037			
Riparian management in 1999	spring, no access of Red Wall area during high flows.			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0 river miles in 1981 to 0.02 river miles in 1995.			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 1188 acres late seral: 3132 acres mid seral: 785 acres early seral: 113 acres unclassified: 200 acres			
Restricted grazing, necessary actions:	Rest Big Gulch pasture for five years. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the December 6 to February 15 period.			
No Riparian Grazing miles of fence	private	0.7	public	0.0
acres excluded	private	4	public	0
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	172	public	760
public land AUMs canceled	51			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2623 Steiwer

Location:	Segment 2	River Miles 93.5 - 103.4		
Category:	I			
AUMs within lease:	230			
Miles of river bank	private	4.9	public	5.0
Acres within WSR boundaries	private	535	public	1385
Acres within allotment	private	38,810	public	4376
Riparian management in 1988	spring on 4.0 miles of public, non-use by permittee on 1.0 miles of public and 2.7 miles of private though the area was subject to trespass grazing during low river flows, season long on 2.2 miles of private.			
NEPA documents	87-033			
Riparian management in 1999	same as above, trespass has been resolved.			
Riparian monitoring	Photo point on river mile 100, established in 1988 was remeasured in 1990 and 1994. Management was changed from season long to spring use in 1987. Photos show an expansion of willow. Willow Report: shows an increase in willow communities from 0 river miles in 1981 to 1.87 river miles in 1995.			
Upland monitoring	Trend plot (frequency) in Juniper Island pasture established in 1987 and remeasured in 1990 and 1994. Management was changed to spring rotation in 1987, monitoring shows an increase in *Sporobolus cryptandrus*. Trend plot (Daubenmire) in Bills Place, established in 1987 was remeasured in 1990 and 1994. Management was changed to spring rotation in 1987, monitoring shows an increase in *Sporobolus cryptandrus*. Trend plot (Daubenmire) in Juniper Island pasture, established in 1987 was remeasured in 1990, lost and re-established in 1994. Management described above, monitoring shows an apparent decrease in *Gutierrezia sarothrae* and an increase in *Sporobolus cryptandrus*.			
Ecological Status as measured in 1980:	land exchange has eliminated the lands measured from public ownership.			
Restricted grazing, necessary actions:	Exclude grazing from Juniper Island campsite with 0.7 miles of fence. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure. Pursue opportunities to exchange lands north of Butte Creek for other lands within the WSR boundary.			
No Riparian Grazing miles of fence	private	2.2	public	4.2
acres excluded	private	10	public	24
other actions				
No Grazing: miles of fence	private	0.0	public	6.6
acres excluded	private	0	public	1280
public land AUMs canceled	53			
Other actions	approximately 160 acres of public land in Wheeler county could be traded for private lands elsewhere in the WSR boundary, eliminating the need for 2.0 miles of fence.			

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2584 Catherine Maurer

Location:	Segment 2	River Miles Left 92.9 - 106.1, Right 103.4 - 107.0		
Category:	I			
AUMs within lease:	789			
Miles of river bank	private	10.3	public	6.5
Acres within WSR boundaries	private	1427	public	1815
Acres within allotment	private	26,168	public	14,683
Riparian management in 1988	season long			
NEPA documents	91-038, 95-009, 97-014			
Riparian management in 1999	exclusion on 0.5 miles of public and 2.6 miles of private, spring use on 1.5 miles private and 3.3 miles public, season long on 6.2 miles of private and 2.7 miles public.			
Riparian monitoring	Photoplot at spring site in Lakes Pasture established in 1998, management changed from season long to spring use in 1999. Willow Report: shows an increase in willow communities from 0 river miles in 1981 to 1.34 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) in Rayburn pasture was established in 1987 and remeasured in 1993. Management was season long use, perennial grasses increased in vigor and density. Trend plot (Daubenmire) in River pasture was established in 1987 and remeasured in 1993 and 1998. Management was spring and early summer use, changed to winter and early spring use in 1997, monitoring shows an increase in perennial bunchgrasses. Trend plot (Daubenmire) in Lakes pasture was established in 1987 and remeasured in 1993. Management was season long, changed to spring in 1999. Monitoring shows an increase in *Bromus tectorum* and *Stipa thurberiana* and a decrease in *Gutierrezia sarothrae*.			
Ecological Status as measured in 1980:	climax: 151 acres late seral: 3421 acres mid seral: 4017 acres early seral: 6550 acres unclassified: 544 acres			
Restricted grazing, necessary actions:	same as existing management for the Lakes and River pastures. For the Clarno Rapids area, adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to June 1 period. For the Rayburn pasture, develop an allotment management plan or pursue exchange opportunities for other lands within WSR boundaries.			
No Riparian Grazing miles of fence	private	6.9	public	6.0
acres excluded	private	42	public	38
other actions				
No Grazing: miles of fence	private	0.3	public	6.7
acres excluded	private	880	public	5036
public land AUMs canceled	109			
Other actions	approximately 320 acres of public land in Wasco county could be traded for private lands elsewhere in the WSR boundary, eliminating the need for 3.5 miles of fence.			

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2614 Clarno Homestead

Location:	Segment 2	River Miles 106.1 - 108.3 and 108.7 - 109.3		
Category:	I			
AUMs within lease:	63			
Miles of river bank	private	0.4	public	2.8
Acres within WSR boundaries	private	25	public	396
Acres within allotment	private	32	public	1693
Riparian management in 1988	season long			
NEPA documents	95-009, 96-060			
Riparian management in 1999	unleased			
Riparian monitoring	Willow Report shows no change in the extent of willow communities within the allotment between 1981 and 1995.			
Upland monitoring	Trend plot (Daubenmire) established in 1987 was remeasured in 1993 and 1998. Season long use was changed to non-use in 1990. Monitoring shows an increase in *Stipa thurberiana* and a decrease in *Poa sandbergii*.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid seral: 0 acres early seral: 1823 acres unclassified: 70 acres			
Restricted grazing, necessary actions:	Adjust lease to retire grazing on public lands within the WSR boundaries.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMs canceled				
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2588 Spud

Location:	Segment 3	River Miles 110.7 - 114.5		
Category:	M			
AUMs within lease:	40			
Miles of river bank	private	3.2	public	0.6
Acres within WSR boundaries	private	494	public	148
Acres within allotment	private	650	public	608
Riparian management in 1988	exclusion of 0.1 miles of public river bank and 3.2 miles of private river bank, these riparian areas subject to limited trespass during low river flows, spring grazing on 0.5 miles of public river bank.			
NEPA documents	90-035			
Riparian management in 1999	same as above except trespass is largely resolved.			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.5 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) established in 1987 and remeasured in 1994. Grazing occurs during the winter, monitoring shows an increase in *Sporobolus cryptandrus*.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 427 acres mid seral: 0 acres early seral: 159 acres unclassified: 22 acres			
Restricted grazing, necessary actions:	grazing as above, construct 0.3 miles of fence. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 15 to May 15 period.			
No Riparian Grazing: miles of fence	private	0.0	public	0.3
acres excluded	private	0	public	1
other actions				
No Grazing: miles of fence	private	0.0	public	0.4
acres excluded	private	494	public	148
public land AUMs canceled	5			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2587 Corral Canyon

Location:	Segment 3	River Miles 109.6 - 111.4		
Category:	I			
AUMs within lease:	88			
Miles of river bank	private	1.7	public	0.1
Acres within WSR boundaries	private	66	public	4
Acres within allotment	private	1200	public	2101
Riparian management in 1988	spring, early summer.			
NEPA documents	97-007			
Riparian management in 1999	spring use with livestock removed by May 15th.			
Riparian monitoring	none			
Upland monitoring	Trend plot (3x3 photoplot) in the Corral Canyon Pasture was established in 1987 and remeasured in 1990 and 1994. Grazing occurs during critical growing season each year except for rest in 1992 and 1997, utilization levels are light to moderate. Monitoring shows an increase in *Stipa thurberiana*.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 17 acres mid seral: 0 acres early seral: 2006 acres unclassified: 78 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the March 15 to May 15 period.			
No Riparian Grazing: miles of fence	private	1.7	public	0.1
acres excluded	private	14	public	4
other actions				
No Grazing: miles of fence	private	1.2	public	0.3
acres excluded	private	52	public	4
public land AUMs canceled	0			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2512 Big Muddy

Location:	Segment 3	River Miles 114.5 - 128.1		
Category:	I			
AUMs within lease:	605			
Miles of river bank	private	8.0	public	5.6
Acres within WSR boundaries	private	1069	public	1142
Acres within allotment	private	64,483	public	14,890
Riparian management in 1988	winter and spring use by permittees, riparian areas subject to trespass grazing during low river flows.			
NEPA documents	none			
Riparian management in 1999	spring			
Riparian monitoring	Photo point on Currant Creek established in 1987 and Remeasured in 1994. There was no discernable change. Willow Report: shows an increase in willow communities from 0 river miles in 1981 to 0.47 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) west of Melendy Ridge was established in 1987 and remeasured in 1994. There is no discernable change. Trend plot (3x3 photoplot) in Domogalla Canyon was established in 1987, but could not be found in 1994, the study was reestablished. Trend plot (3x3 photoplot) in Currant Creek Canyon was established in 1987, but could not be found in 1994, the study was reestablished.			
Ecological Status as measured in 1980:	climax: 197 acres late seral: 1861 acres mid seral: 4211 acres early seral: 8070 acres unclassified: 551 acres			
Restricted grazing, necessary actions:	Construct 3.2 miles fence to exclude 1.9 riverbank miles and rest for 10 years 3.4 miles of riverbank. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 15 to May 15 period.			
No Riparian Grazing miles of fence	private	6.9	public	3.2
acres excluded	private	42	public	19
other actions				
No Grazing: miles of fence	private	1.6	public	3.2
acres excluded	private	396	public	1280
public land AUMs canceled	30			
Other actions				

2545 Cherry Creek

Location:	Segment 3	River Miles 128.1 - 131.6		
Category:	I			
AUMs within lease:	438			
Miles of river bank	private	2.6	public	0.9
Acres within WSR boundaries	private	427	public	164
Acres within allotment	private	49,960	public	11,095
Riparian management in 1988	winter and spring use by permittees, riparian areas subject to grazing trespass during low river flows.			
NEPA documents	none			
Riparian management in 1999	winter and spring, trespass largely resolved.			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.23 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) in Horse Heaven Pasture was established in 1987 and remeasured in 1990 and 1994. There is no discernable change.			
Ecological Status as measured in 1980:	climax: 892 acres late seral: 3759 acres mid seral: 3362 acres early seral: 3082 acres unclassified: 0 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the March15 to May 15 period.			
No Riparian Grazing miles of fence	private	3.9	public	1.1
acres excluded	private	24	public	7
other actions				
No Grazing: miles of fence	private	0.0	public	0.9
acres excluded	private	0	public	200
public land AUMs canceled	6			
Other actions				

2624 Burnt Ranch

Location:	Segment 3	River Miles 131.6 - 133.0		
Category:	C			
AUMs within lease:	7			
Miles of river bank	private	0.0	public	1.4
Acres within WSR boundaries	private	0	public	113
Acres within allotment	private	2080	public	328
Riparian management in 1988	spring and early summer			
NEPA documents	none			
Riparian management in 1999	early spring (between March 15 and April 15) for two weeks every other year.			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.46 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) in the River Pasture (riparian management pasture) was established in 1989 and remeasured in 1995. Grazing occurred each spring during the critical growing season until 1997 when it changed to two weeks use every other year. Monitoring shows an increase in *Oryzopsis hymenoides*.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid seral: 0 acres early seral: 316 acres unclassified: 12 acres			
Restricted grazing, necessary actions:	Provide three years rest for the River pasture, then authorize grazing as stated above for 1999.			
No Riparian Grazing miles of fence	private	0.0	public	1.4
acres excluded	private	0	public	8
other actions				
No Grazing: miles of fence	private	0.0	public	0.9
acres excluded	private	0	public	180
public land AUMs canceled	2			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2641 North 80

Location:	Segment 3	River Miles 133.0 - 133.2		
Category:	C			
AUMs within lease:	3			
Miles of river bank	private	0.2	public	0.0
Acres within WSR boundaries	private	9	public	0
Acres within allotment	private	25	public	78
Riparian management in 1988	season long			
NEPA documents	none			
Riparian management in 1999	rotation			
Riparian monitoring	none			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 6 acres			
	late seral: 26 acres			
	mid seral: 24 acres			
	early seral: 22 acres			
	unclassified: 0 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	0.2	public	0.0
acres excluded	private	3	public	0
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	0	public	0
public land AUMs canceled	0			
Other actions				

2533 Sutton Mountain

Location:	Segment 3	River Miles 135.7 - 140.0		
Category:	I			
AUMs within lease:	1020			
Miles of river bank	private	0.2	public	6.7
Acres within WSR boundaries	private	30	public	1163
Acres within allotment	private	640	public	25,315
Riparian management in 1988	winter and spring by permittee, riparian areas received trespass grazing during low river flows.			
NEPA documents	92-021, 92-044			
Riparian management in 1999	exclusion, non-use and spring. Spring grazing occurs on 2.6 miles of the river. The Agate Point Wetland Pasture is in non-use pending improved riparian conditions and encompasses 2.6 miles of the river. The Priest Hole Field excludes livestock grazing and occupies 0.9 miles of the river. The Liberty Bottom Field also excludes grazing and consists of 0.8 miles of the river.			
Riparian monitoring	Six photo points (trend overview) and five photo points (cover board), between river miles 136.5 and 137.6, were established in 1995 in the Agate Point Wetland Pasture. Not remeasured. Photo point (cover board) on Bridge Creek in the Manning Field was established in 1989 and remeasured in 1991, 1995, 1997 and 1999. Spring grazing has occurred since acquisition of the land in 1988. Grazing use varied from 2 to 3 months between 1988 and 1992, to 3 weeks from 1993 to 1998 with non-use in 1997. Monitoring shows an increase in willow cover. Photo point (cover board) on Bridge Creek in the Connley Field was established in 1989 and remeasured in 1991, 1995 and 1999. Grazing use varied from 2 to 3 months from 1988 to 1992, to one month from 1993 to 19996. Non-use in 1997 and 1998. Monitoring shows an increase in willow cover. Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.75 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) in the Stovepipe Springs Pasture was established in 1987 and remeasured in 1991 and 1995. Grazing occurs during the spring, monitoring shows an increase in *Sporobolus cryptandrus*. Trend plot (3x3 photoplot) in the Stovepipe Springs Pasture was established in 1988 and remeasured in 1991 and 1995. Grazing occurs during the spring, monitoring shows no obvious change.			
Ecological Status as measured in 1980:	ecological status was determined for 6995 acres, an additional 18320 acres became public in 1992, but status for the acquired land will be determined when possible. climax: 897 acres late seral: 1911 acres mid seral: 988 acres early seral: 2940 acres unclassified: 259 acres			
Restricted grazing, necessary actions:	Construct 2.3 miles fence to create 2.6 miles of riverbank exclusion. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to May 1 period.			
No Riparian Grazing miles of fence	private	0.0	public	1.8
acres excluded	private	0	public	11
other actions				

No Grazing:	miles of fence	private	0.0	public	2.3
	acres excluded	private	0	public	1240
public land	AUMs canceled	45			
	Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2592 Mary Misener

Location:	Segment 3	River Miles 141.4 - 142.8		
Category:	I			
AUMs within lease:	52			
Miles of river bank	private	1.4	public	0.0
Acres within WSR boundaries	private	269	public	0
Acres within allotment	private	640	public	595
Riparian management in 1988	season long			
NEPA documents	92-044			
Riparian management in 1999	exclusion			
Riparian monitoring	none			
Upland monitoring	Trend plot (3x3 photoplot) was established in 1987 and remeasured in 1991. Grazing occurs during winter and early spring, monitoring shows an increase in *Stipa thurberiana*.			
	Trend plot (Daubenmire) was established in 1995 and has not been remeasured. Grazing occurs during winter and early spring.			
Ecological Status as measured in 1980:	climax: 0 acres			
	late seral: 172 acres			
	mid seral: 111 acres			
	early seral: 289 acres			
	unclassified: 23 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMs canceled				
Other actions				

2532 T. Cole

Location:	Segment 3	River Miles 139.0 - 140.8		
Category:	C			
AUMs within lease:	117			
Miles of river bank	private	1.1	public	0.7
Acres within WSR boundaries	private	157	public	374
Acres within allotment	private	25,280	public	2116
Riparian management in 1988	autumn through spring by permittee, trespass grazing during low river flows.			
NEPA documents	none			
Riparian management in 1999	winter, trespass resolved.			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 1.06 river miles in 1995.			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 21 acres late seral: 864 acres mid seral: 54 acres early seral: 634 acres unclassified: 60 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 15 to May 15 period.			
No Riparian Grazing miles of fence	private	1.2	public	0.6
acres excluded	private	7	public	4
other actions				
No Grazing: miles of fence	private	0.0	public	2.8
acres excluded	private	42	public	520
public land AUMs canceled	17			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2659 Packsaddle

Location:	Segment 3	River Miles 143.2 - 144.2		
Category:	C			
AUMs within lease:	20			
Miles of river bank	private	1.0	public	0.0
Acres within WSR boundaries	private	70	public	0
Acres within allotment	private	481	public	330
Riparian management in 1988	winter and spring by permittee, riparian areas subject to grazing trespass during low river flows.			
NEPA documents	92-044			
Riparian management in 1999	exclusion			
Riparian monitoring	none			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 43 acres late seral: 99 acres mid seral: 99 acres early seral: 76 acres unclassified: 13 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMs canceled				
Other actions				

2577 Byrd's Point

Location:	Segment 3	River Miles 131.7 - 134.2 River Miles 135.3 - 136.4		
Category:	I			
AUMs within lease:	94			
Miles of river bank	private	1.6	public	2.0
Acres within WSR boundaries	private	305	public	285
Acres within allotment	private	4612	public	1455
Riparian management in 1988	season long			
NEPA documents	87-003, 98-058			
Riparian management in 1999	exclusion			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.35 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) established in 1993 and has not been remeasured.			
Ecological Status as measured in 1980:	climax: 224 acres late seral: 495 acres mid seral: 442 acres early seral: 402 acres unclassified: 0 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.0	public	1.6
acres excluded	private	80	public	360
public land AUMs canceled	25			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2633 Amine Peak

Location:	Segment 3	River Miles 122.0 - 131.6		
Category:	I			
AUMs within lease:	294			
Miles of river bank	private	5.7	public	3.9
Acres within WSR boundaries	private	839	public	883
Acres within allotment	private	11,062	public	4349
Riparian management in 1988	winter and spring by permittee, riparian areas received grazing trespass during low river flows.			
NEPA documents	87-003			
Riparian management in 1999	spring			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.58 river miles in 1995.			
Upland monitoring	Trend plot (Daubenmire) established in 1995 has not been remeasured.			
Ecological Status as measured in 1980:	climax: 348 acres late seral: 1479 acres mid seral: 1304 acres early seral: 1218 acres unclassified: 0 acres			
Restricted grazing, necessary actions:	Construct 1.5 miles of fence to create 1.6 miles of riverbank exclusion. Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 15 to May 15 period.			
No Riparian Grazing miles of fence	private	5.7	public	3.9
acres excluded	private	34	public	24
other actions				
No Grazing: miles of fence	private	0.8	public	2.1
acres excluded	private	174	public	800
public land AUMs canceled	35			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2535 Hayfield

Location:	Segment 3	River Miles 118.0 - 119.6		
Category:	C			
AUMs within lease:	11			
Miles of river bank	private	0.9	public	0.7
Acres within WSR boundaries	private	141	public	86
Acres within allotment	private	2360	public	345
Riparian management in 1988	season long			
NEPA documents	87-010, 90-089			
Riparian management in 1999	spring			
Riparian monitoring	none			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 0 acres			
	late seral: 301 acres			
	mid seral: 31 acres			
	early seral: 0 acres			
	unclassified: 13 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 14 days during the March 15 to May 15 period.			
No Riparian Grazing miles of fence	private	1.2	public	1.2
acres excluded	private	7	public	7
other actions				
No Grazing: miles of fence	private	0.0	public	0.0
acres excluded	private	0	public	90
public land AUMs canceled	0			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2656 Dry Knob

Location:	Segment 3	River Miles 112.9 - 116.9		
Category:	C			
AUMs within lease:	7			
Miles of river bank	private	3.2	public	0.8
Acres within WSR boundaries	private	731	public	30
Acres within allotment	private	900	public	275
Riparian management in 1988	winter and spring, riparian areas subjected to grazing trespass during low river flows.			
NEPA documents	none			
Riparian management in 1999	autumn through spring			
Riparian monitoring	none			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 22 acres late seral: 93 acres mid seral: 83 acres early seral: 76 acres unclassified: 1 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 15 to May 15 period.			
No Riparian Grazing miles of fence	private	1.8	public	0.4
acres excluded	private	9	public	2
other actions				
No Grazing: miles of fence	private	0.1	public	1.1
acres excluded	private	30	public	34
public land AUMs canceled	2			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2649 Rim

Location:	Segment 3	River Miles allotment contains no river bank, but		
Category:	C	lies within WSR boundaries.		
AUMs within lease:	3			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	40	public	300
Acres within allotment	private	1606	public	301
Riparian management in 1988	n/a, allotment within the WSR corridor, but not on the river.			
NEPA documents	none			
Riparian management in 1999	n/a, allotment within the WSR corridor, but not on the river.			
Riparian monitoring	none			
Upland monitoring	none			
Ecological Status as measured in 1980:	climax: 0 acres			
	late seral: 172 acres			
	mid seral: 0 acres			
	early seral: 118 acres			
	unclassified: 11 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.1	public	0.7
acres excluded	private	0	public	300
public land AUMs canceled	3			
Other actions				

2536 Spring Basin

Location:	Segment 3	River Miles no riverbank on allotment, but portions		
Category:	I	lie within the WSR boundaries.		
AUMs within lease:	146			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	3	public	90
Acres within allotment	private	24,280	public	5363
Riparian management in 1988	no riverbank			
NEPA documents				
Riparian management in 1999	no riverbank			
Riparian monitoring	none			
Upland monitoring	Trend plot (frequency) in the Spring Basin WSA was established in 1987 and remeasured in 1990. Grazing generally occurs between November 1 and February 28. There is no discernable change. Trend plot (3x3 photoplot) in the Spring Basin WSA was established in 1987 and remeasured in 1990. Grazing generally occurs between November 1 and February 28. There is no discernable change.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 3275 acres mid seral: 450 acres early seral: 1438 acres unclassified: 200 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.1	public	1.1
acres excluded	private	0	public	100
public land AUMs canceled	2			
Other actions				

2630 Tripp

Location:	Segment 3	River Miles 111.9 - 112.5		
Category:	I			
AUMs within lease:	7			
Miles of river bank	private	0.4	public	0.2
Acres within WSR boundaries	private	18	public	80
Acres within allotment	private	18	public	80
Riparian management in 1988	season long			
NEPA documents	none			
Riparian management in 1999	season long			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.16 river miles in 1995.			
Upland monitoring	Trend plot (frequency) in the Upland Pasture was established in 1987 and remeasured in 1993. Grazing is winter use only and monitoring shows an increase in *Stipa thurberiana*. Trend plot (3x3 photoplot) in the Upland Pasture was established in 1987 and remeasured in 1993. Grazing is winter use only and monitoring shows an increase in *Festuca idahoensis*. Trend plot (3x3 photoplot) in the Upland Pasture was established in 1987 and remeasured in 1993. Grazing is winter use only and monitoring shows a decrease in *Poa secunda*.			
Ecological Status as measured in 1980:	climax: 6 acres late seral: 27 acres mid seral: 24 acres early seral: 22 acres unclassified: 1 acres			
Restricted grazing, necessary actions:	exclusion, construct 0.6 miles of fence. Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence	private	0.4	public	0.2
acres excluded	private	2	public	1
other actions				
No Grazing: miles of fence	private	0.0	public	0.3
acres excluded	private	18	public	80
public land AUMs canceled	7			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2544 Circle S

Location:	Segment 3	River Miles 153.7 - 156.0		
Category:	I			
AUMs within lease:	16			
Miles of river bank	private	1.5	public	0.8
Acres within WSR boundaries	private	120	public	161
Acres within allotment	private	1596	public	598
Riparian management in 1988	non-use by lessee, but trespass use occurring season long.			
NEPA documents	98-058			
Riparian management in 1999	spring			
Riparian monitoring	Photo point at river mile 153.8, established in 1989 and remeasured in 1994. Sporadic trespass use occurring season long. Monitoring shows no obvious change. Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.15 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) was established in 1989 and remeasured in 1994. Sporadic trespass use occurring season long. Monitoring shows an increase in *Stipa comata*.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid seral: 499 acres early seral: 0 acres unclassified: 19 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 15 to May 15 period and rested every other year.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as no grazing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0	public	0
acres excluded	private	0	public	240
public land AUMs canceled	3			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2537 Dead Dog Canyon

Location:	Segment 3	River Miles 147.6 - 150.2		
Category:	I			
AUMs within lease:	243			
Miles of river bank	private	1.2	public	1.4
Acres within WSR boundaries	private	111	public	90
Acres within allotment	private	400	public	3906
Riparian management in 1988	spring, with trespass use occurring season long			
NEPA documents	92-044, 98-058			
Riparian management in 1999	exclusion			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.17 river miles in 1995.			
Upland monitoring	none			
Ecological Status as measured in 1980:	ecological status was determined for 1360 acres, an additional 2546 acres became public in 1992, but status for the acquired land will be determined when possible. climax: 176 acres late seral: 414 acres mid seral: 408 acres early seral: 312 acres unclassified: 50 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.0	public	0.3
acres excluded	private	91	public	90
public land AUMs canceled	7			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2556 Murray Howard

Location:	Segment 3	River Miles 150.2 - 156.0		
Category:	I			
AUMs within lease:	33			
Miles of river bank	private	3.2	public	2.6
Acres within WSR boundaries	private	652	public	475
Acres within allotment	private	7840	public	846
Riparian management in 1988	winter, spring, summer			
NEPA documents	98-058			
Riparian management in 1999	exclusion			
Riparian monitoring	Photo point (Daubenmire cover board) at river mile 153.4, established in 1989 and remeasured in 1994. Accurate grazing information not available, but random observations indicated various amounts of use occurred spring, summer and winter. Monitoring shows a decrease in willow density at this study. Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.35 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) was established in 1989 and remeasured in 1994. Accurate grazing information not available, but random observations indicate various amounts of use occurred spring, summer and winter. Monitoring shows no discernable change.			
Ecological Status as measured in 1980:	climax: 59 acres late seral: 122 acres mid seral: 362 acres early seral: 463 acres unclassified: 39 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.2	public	2.4
acres excluded	private	189	public	320
public land AUMs canceled	16			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2570 Zack Keys

Location:	Segment 3	River Miles 148.8 - 149.6		
Category:	I			
AUMs within lease:	58			
Miles of river bank	private	0.6	public	0.2
Acres within WSR boundaries	private	204	public	98
Acres within allotment	private	1680	public	1607
Riparian management in 1988	season long			
NEPA documents	98-058			
Riparian management in 1999	exclusion			
Riparian monitoring	Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.10 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) was established in 1987, but was destroyed and reestablished in 1995.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid seral: 1548 acres early seral: 0 acres unclassified: 59 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.0	public	0.6
acres excluded	private	0	public	90
public land AUMs canceled	2			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2569 Zack Keys

Location:	Segment 3	River Miles 145.6 - 148.8 River Miles 150.9 - 153.7		
Category:	I			
AUMs within lease:	71			
Miles of river bank	private	3.8	public	2.2
Acres within WSR boundaries	private	427	public	449
Acres within allotment	private	7885	public	2001
Riparian management in 1988	season long			
NEPA documents	98-058			
Riparian management in 1999	exclusion			
Riparian monitoring	Photo point at river mile 152.4 was established in 1989 and remeasured in 1994. Accurate grazing information not available, but random observations indicate various amounts of use occurred spring, summer and winter. Monitoring shows an increase in willow. Willow Report: shows an increase in willow communities from 0.0 river miles in 1981 to 0.22 river miles in 1995.			
Upland monitoring	Trend plot (3x3 photoplot) was established near river mile 152.4 in 1989, but destroyed and then reestablished in 1995 as a Daubenmire study.			
Ecological Status as measured in 1980:	climax: 203 acres late seral: 1239 acres mid seral: 219 acres early seral: 266 acres unclassified: 74 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	0.0	public	1.0
acres excluded	private	107	public	440
public land AUMs canceled	12			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

2589 McQuinn

Location:	Segment 4	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMs within lease:	1			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	322	public	40
Riparian management in 1988	no river bank			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies			
Upland monitoring	No established monitoring studies			
Ecological Status as measured in 1980:	climax: 3 acres			
	late seral: 14 acres			
	mid seral: 12 acres			
	early seral: 11 acres			
	unclassified: 0 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMs canceled				
Other actions				

2578 Logan

Location:	Segment 4	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMs within lease:	166			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	13,570	public	2194
Riparian management in 1988	No river bank within the allotment			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Ecological Status as measured in 1980:	climax: 421 acres			
	late seral: 774 acres			
	mid seral: 0 acres			
	early seral: 918 acres			
	unclassified: 81 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMs canceled				
Other actions				

2517 Borschawa

Location:	Segment 4	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of river		
AUMs within lease:	6			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	2040	public	120
Riparian management in 1988	No river bank within the allotment			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies			
Upland monitoring	Trend plot (3x3) established in 1989 and re-measured in 1993. Authorized grazing season is May 1 to July 15. Monitoring shows an increase in *Agropyron spicatum*. Trend plot (line intercept) established in 1993. No re-measured.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 56 acres mid seral: 0 acres early seral: 59 acres unclassified: 4 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMs canceled				
Other actions				

2563 Horseshoe Creek

Location:	Segment 4	River Miles: 158.2 - 170.0		
Category:	M			
AUMs's within lease:	100			
Miles of riverbank:	private	8.8	public	3.0
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	26,740	public:	1,667
Riparian management in 1988:	Exclusion of 0.5 miles, spring grazing (5/1 to 6/15) on 1.5 miles, and season long on 1.0 mile of public riverbank, season long on 8.8 miles of private river bank.			
NEPA documents:	None			
Riparian management in 1999:	Exclusion of 0.5 mile of public river bank, grazing from 10/1 until 2/10 on 2.5 miles of public and 8.8 miles of private river bank.			
Riparian monitoring:	Photo point at river mile 161.7, established in 1987, and reread in 1990 and 1995. Monitoring shows an increase in herbaceous vegetation on the gravel bars.			
Upland monitoring	Trend plot (3 X 3 photoplot) was established in 1990 and reread in 1995. Monitoring shows an increase in *Stipa comata* and *Sporobolus cryptandrus* A line intercept study(frequency) was established in 1991. Study has not been reread.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 160 acres mid seral:. 530 acres early seral: 333 acres unclassified: 39 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of October 1 to May 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period. Adjust lease to prohibit grazing on public lands within riparian exclosure.			
No Riparian Grazing miles of fence:	private	8.8	public	2.5
acres excluded:	private	107	public	36
other actions:	none			
No Grazing miles of fence:	private	8.8	public	2.5
acres excluded:	private	1408	public	480
Public land AUMs canceled	48			
Other Actions	None			

2625 David Stirewalt

Location	Segment 4	River Miles: 160.3 - 163.0		
Category:	I			
AUMs with lease:	65			
Miles of river bank:	private	0.0	public	2.7
Acres with WSR boundaries:	private	0	public	0
Acres within allotment	private	4280	public	1340
Riparian management in 1988:	exclusion of 2.7 miles of river bank.			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring:	No established photo points.			
Upland monitoring:	Trend plot (3 X 3 photoplot) established in 1987 north of the highway north of the John Day River and reread in 1992. Grazing is excluded from the area where the study was established. Monitoring showed as increase in *Sporobolus cryptandrus*. Trend plot (line intercept) was established in 1992. Study has not been reread. Grazing has been excluded from the area where the study was established.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid-seral: 1,121 acres early-seral: 169 acres unclassified: 50 acres			
Restricted grazing, necessary actions:	same as existing. Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence:	private:	n/a	public:	n/a (same as existing)
acres excluded	private:		public:	
other actions:	none			
No Grazing: miles of fence:	private	0	public	3.2
acres excluded	private	0	public	432
public land AUMs canceled:	43			
Other actions:				

2626 Harper Mt.

Location:	Segment 4	River Miles: 163 - 167.2		
Category:	I			
AUMS within lease:	33			
Miles of riverbank:	private:	2.2	public	2.0
Acres within WSR boundaries:	private:	0	public	0
Acres within the allotment	private	8180	public:	920
Riparian management in 1988:	Season long			
NEPA documents:	97-121			
Riparian management in 1999:	Exclusion.			
Riparian monitoring:	No established photo points.			
Upland monitoring:	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing; miles of fence:	private:	n/a	public:	n/a (same as existing)
acres excluded:	private:		public:	
other actions:	none			
No Grazing miles of fence:	private	2.7	public	2.9
acres excluded	private	432	public	464
Public land AUMS's canceled:	43			
other actions:				

2613 Frank R. Robinson

Location:	Segment 4	River Miles 164.0 - 164.3		
Category:	C			
AUMS within lease:	4			
Miles of river bank	private	0.0	public	0.3
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1230	public	240
Riparian management in 1988	spring, summer (5/1 - 8/31)			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Ecological Status as measured in 1980:	climax: 0 acres			
	late seral: 0 acres			
	mid seral: 193 acres			
	early seral: 0 acres			
	unclassified: 7 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	0.0	public	0.3
acres excluded	private	0	public	3
other actions				
No Grazing: miles of fence	private	0.0	public	2.3
acres excluded	private	0	public	115
public land AUMS canceled	3			
Other actions				

2585 Seek Peak

Location:	Segment 4	River Miles 176.4 - 177.8		
Category:	C			
AUMS within lease:	11			
Miles of river bank	private	1.4	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1320	public	320
Riparian management in 1988	Exclusion of 1.4 miles of private land river bank.			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Ecological Status as measured in 1980:	climax: 0 acres			
	late seral: 285 acres			
	mid seral: 0 acres			
	early seral: 23 acres			
	unclassified: 12 acres			
Restricted grazing, necessary actions:	same as existing.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

2627 Robert W. Straub

Location:	Segment 4	River Miles 178.0 - 179.4		
Category:	C			
AUMS within lease:	69			
Miles of river bank	private	0.0	public	1.4
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	5000	public	678
Riparian management in 1988	Spring and summer			
NEPA documents	none			
Riparian management in 1999	exclusion			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid seral: 288 acres early seral: 365 acres unclassified: 25 acres			
Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence	private	0.0	public	1.4
acres excluded	private	0	public	17
other actions				
No Grazing: miles of fence	private	0.0	public	3.3
acres excluded	private	0	public	224
public land AUMS canceled	22			
Other actions				

2575 Andrew Leckie

Location:	Segment 4	River Miles: 181.0 - 181.3		
Category	I			
AUMS within lease:	1			
Miles of river bank:	private	0	public:	0.5
Acres within WSA boundaries:	private	0	public	0
Acres within allotment:	private	2,000	public	40
Riparian management in 1988:	exclusion of 0.5 miles of river bank.			
NEPA documents:	none			
Riparian management in 1999:	Exclusion of 0.5 miles of river bank			
Riparian monitoring:	Photo point established in 1987. Photo point has not been reread.			
Upland monitoring:	Trend plot(3 X 3 photoplot) established in 1987 and reread in 1988. Increase in *Sporobolus cryptandrus*			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 0 acres mid-seral: 14 acres early-seral 39 acres unclassified: 2 acres			
Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence:	private	n/a	public	n/a (same as existing)
acres excluded:	private		public	
other actions:	none			
No Grazing miles of fence:	private	0.0	public	1.0
acres excluded:	private	0	public	160
Public land AUMS's canceled	1			
Other actions:	none			

2554 Charles Hill

Location:	Segment 4	River Miles 178.5 - 181.0, 181.3 - 182.8		
Category:	I			
AUMS within lease:	86			
Miles of river bank:	private	7.3	public	0.8
Acres within WSR boundaries	private	0	public	0
Acres within allotment:	private	1,520	public	1,835
Riparian management in 1988:	Spring grazing on 0.8 miles of public and 2.0 miles of private river bank and summer grazing on 5.3 miles of private river bank.			
NEPA documents:	none			
Riparian management in 1999:	same as above.			
Riparian monitoring:	No established monitoring studies.			
Upland monitoring:	Trend plot(3 X 3 photoplot) was establish in 1987 and reread in 1991 and 1996. Livestock graze the pasture during the spring, mid-April to the end of May. Monitoring shows an increase in *Sporobolus cryptandrus*. Trend plot(3 X 3 photoplot).was established in 1991 and reread in 1996. Livestock grazed the pasture from April 15 until May 31. Monitoring shows no increase in perennial plants in the study plot. *Agropyron spicatum* can only be seen in areas in between rocks. Trend plot(3 X 3 photoplot) was established in 1993. Photoplot has not been reread. Line intercept study(frequency) was established in 1991 and reread in 1996. Livestock graze the pasture from April 15 until May 31. There was no increase in the frequency of key species. Trend plot(3 X 3 photoplot) was established in 1991 and reread in 1996. Livestock graze the pasture from April 15 until May 31. Topography limits the amount of time that livestock graze the area. Monitoring shows an increase in ground cover of herbaceous vegetation.			
Ecological Status as measured in 1980	climax: 0 acres late seral: 556 acres mid seral: 1,751 acres early seral: 156 acres unclassified: 94 acres.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of April 15 to June 30 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 14 days during the grazing period.			
No Riparian Grazing miles of fence:	private	7.3	public	0.8
acres excluded:	private	88	public:	10
other actions:	none			
No Grazing miles of fence:	private	7.8	public:	1.3
acres excluded:	private	560	public:	128
Public land AUMS canceled:	13			
Other actions				

2528 Sentinel Peak

Location:	Segment 4	River Miles: 170.5 - 172.5		
Category:	C			
AUMS's within lease	44			
Miles of river bank:	private:	3.0	public:	1.0
Acres within WSA boundaries:	private	0	public	0
Acres within the allotment	private	1,335	public	1,240
Riparian management in 1988:	Spring grazing, April 15 to May 31, of 0.5 miles of public and 1.5 miles of private river bank and no livestock grazing on 0.5 miles of public and 1.5 miles of private river bank.			
NEPA documents:	91-018, 88-088, 88-062			
Riparian management in 1999:	same as above			
Riparian monitoring:	No established monitoring plots.			
Upland monitoring:	No established monitoring plots.			
Ecological status as measured in 1980:	climax: 0 acres late seral: 474 acres mid seral: 0 acres early seral: 720 acres unclassified: 46 acres			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of April 15 to May 31 on pastures with access to riverbank.			
No Riparian Grazing miles of fence:	private	3.0	public	1.0
Acres excluded:	private	18	public	6
Other actions	none			
No Grazing miles of fence	private	3.5	public	1.5
Acres excluded:	private	240	public	80
Public land AUMS's canceled:	8			
Other actions:	none			

4145 Two County

Location:	Segment 4	River miles 184.5 - 190.5		
Category:	I			
AUMS within the lease:	1,105			
Miles of riverbank:	private	10.6	public	1.4
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	12,750	public	13,796
Riparian management in 1988:	Season long			
NEPA documentation:	91-060, 88-030			
Riparian management in 1999:	Exclusion			
Riparian monitoring:	No established monitoring studies			
Upland monitoring:	Trend plot(3 ft. X 3 ft.) established on the allotment in 1988 and reread in 1993 and 1998. Livestock graze the pasture from May 1 until the end of Sept. There is no discernable change.			
Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing: miles of fence:	private	n/a	public	n/a (same as existing)
Acres excluded:	private		public	
No Grazing miles of fence:	private	n/a	public	n/a (same as existing)
Acres excluded:	private		public	
Public land AUMS's canceled:				
Other actions:				

2662 Johnson Creek

Location:	Segment 4	River Miles: 182.0 183.5		
Category:	I			
AUMS's Within Lease:	7,698			
Miles of riverbank:	private	2.5	public	0.5
Acres within WSA boundaries:	private	0	public	0
Acres within the allotment	private	11,140	public	7,698
Riparian management in 1988:	Grazing from 5/1 to 9/30			
NEPA documentation:	none			
Riparian management in 1999:	Exclusion			
Riparian monitoring:	No established monitoring studies.			
Upland monitoring:	Trend plot(3 ft. X 3 ft.) established in 1997 and reread in 1990 and 1995. Grazing occurred from 5/1 to 9/30 in the uplands. Monitoring showed an increase in *Festuca idahoensis*.			
Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence:	private	n/a	public	n/a (same as existing)
Acres excluded:	private		public	
Other actions:	none			
No Grazing: miles of fence:	private:	n/a	public	n/a (same as existing)
Acres excluded:	private		public	
Public land AUMS's canceled:				
Other actions:				

2501 Herbert Asher

Location:	Segment 4	River Miles 194.5 - 196.8		
Category:	I			
AUMS within lease:	101			
Miles of river bank	private	4.0	public	0.3
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	2039	public	1999
Riparian management in 1988	Exclusion of all river bank.			
NEPA documents				
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	Trend plot (3x3 photoplot) established in 1991 and remeasured in 1996. Livestock graze the pasture in late fall. Monitoring shows an increase in *Agropyron intermedium*. Trend plot (line intercept) established in 1991 and remeasured in 1996. Livestock graze the pasture in late fall. Monitoring shows an increase in *Artemisia tridentata*. Trend plot (3x3 photoplot) established in 1991 and remeasured in 1996. Livestock graze the pasture in winter. Monitoring shows no discernable change. Trend plot (3x3 photoplot) established in 1991 and remeasured in 1996. Livestock graze the pasture in late fall. Monitoring shows no discernable change. Trend plot (line intercept) established in 1991 and remeasured in 1996. Livestock graze the pasture in late fall. Monitoring shows no discernable change.			
Ecological Status as measured in 1980:	climax: 0 acres late seral: 608 acres mid seral: 223 acres early seral: 1093 acres unclassified: 75 acres			
Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4001 Johnny Creek

Location:	Segment 4	River Miles 196.2 - 198.2		
Category:	C			
AUMS within lease:	196			
Miles of river bank	private	1.5	public	0.5
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1918	public	1160
Riparian management in 1988	spring			
NEPA documents	none			
Riparian management in 1999	exclusion			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

2558 Squaw Creek

Location:	Segment 4	River Miles 200.0 - 200.8		
Category:	I			
AUMS within lease:	301			
Miles of river bank	private	1.6	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	7800	public	5741
Riparian management in 1988	Exclusion			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring				
Upland monitoring	Trend plot (3x3 photoplot) established in 1987 and remeasured in 1990 and 1993. Authorized grazing is 4/1 - 11/30. Monitoring shows an increase in *Agropyron spicatum* and *Festuca idahoensis*. Trend plot (3x3 photoplot) established in 1990 and not remeasured.			
Ecological Status as measured in 1980:	climax: 28 acres late seral: 1833 acres mid seral: 2668 acres early seral: 999 acres unclassified: 213 acres			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4076 Cottonwood Creek

Location:	Segment 4	River Miles 205.8 - 207.8		
Category:	I			
AUMS within lease:	204			
Miles of river bank	private	4.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	4440	public	3113
Riparian management in 1988	Season long			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring				
Upland monitoring	Trend plot (line intercept) established in 1992 and remeasured in 1998. Authorized season of use is 4/15 - 10/30. Monitoring shows the area heavily grazed. Trend plot (3x3 photoplot) established in 1988 and remeasured in 1992 and 1997. Livestock graze the pasture from 4/15 - 10/30. Photos show a decrease in *Sitanion hystrix*. Trend plot (3x3 photoplot) established in 1992 and not remeasured. Photo indicates the area is heavily grazed. Trend study (3x3 photoplot) established in 1993 and remeasured in 1998. Livestock graze the area from 4/15 - 10/30. Monitoring shows a decrease in *Agropyron spicatum*. Trend study (line intercept) established in 1992 and remeasured in 1998. Livestock graze the area from 4/15 - 10/30. Monitoring shows no change in the frequency of key species.			

Restricted grazing, necessary actions:	same as existing.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4007 Windy Point

Location:	Segment 4	River Miles 207.8 - 209.0		
Category:	I			
AUMS within lease:	407			
Miles of river bank	private	1.2	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	3330	public	2514
Riparian management in 1988	spring			
NEPA documents	none			
Riparian management in 1999	spring			
Riparian monitoring	No established monitoring studies.			
Upland monitoring				
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4068 Sheep Gulch

Location:	Segment 4	River Miles 208.5 - 209.8		
Category:	I			
AUMS within lease:	292			
Miles of river bank	private	2.6	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	2090	public	3499
Riparian management in 1988	season long			
NEPA documents				
Riparian management in 1999	spring			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	Trend plot (3x3 photoplot) established in 1989 and remeasured in 1995. Livestock graze the pasture during spring, monitoring shows no discernable change in vegetation. Trend plot (line intercept) established in 1989 and remeasured in 1994. Livestock graze the pasture during spring and summer, monitoring shows a decrease in the frequency of *Agropyron spicatum*. Trend plot (line intercept) established in 1989. Livestock graze the pasture during spring, monitoring shows no discernable change. Trend plot (3x3 photoplot) established in 1989 and remeasured in 1994. Livestock graze during spring and summer, monitoring shows a decrease in *Sitanion hystrix*.			
Restricted grazing, necessary actions:	same as existing.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4041 Franks Creek

Location:	Segment 4	River Miles 212.0 - 212.3		
Category:	C			
AUMS within lease:	225			
Miles of river bank	private	0.3	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1255	public	2617
Riparian management in 1988	Exclusion of 0.3 miles of private river bank.			
NEPA documents				
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	Trend plot (3x3 photoplot) established in 1988 and remeasured in 1993 and 1999. Livestock graze this pasture from mid-June until late August. Photos show an increase in *Lupinus spp*.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4023 Triple Fork

Location:	Segment 5	River Miles 226.2 - 226.3		
Category:	C			
AUMS within lease:	20			
Miles of river bank	private	0.1	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	33	public	320
Riparian management in 1988	Exclusion of 0.1 miles of private river bank.			
NEPA documents				
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4084 Lower Damond

Location:	Segment 5	River Miles 235.0 - 235.4		
Category:	C			
AUMS within lease:	36			
Miles of river bank	private	0.8	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	220	public	240
Riparian management in 1988	spring			
NEPA documents	none.			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4168 Grub Creek

Location:	Segment 5	River Miles 249.5 - 251.7		
Category:	C			
AUMS within lease:	14			
Miles of river bank	private	4.4	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	7860	public	80
Riparian management in 1988	unknown			
NEPA documents	none			
Riparian management in 1999	exclusion			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4101 Lower Cupper

Location:	Segment 6	River Miles	allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.			
AUMS within lease:	39				
Miles of river bank	private	0.0	public	0.0	
Acres within WSR boundaries	private	0	public	0	
Acres within allotment	private	1600	public	240	
Riparian management in 1988	allotment contains no river bank				
NEPA documents	none				
Riparian management in 1999	same as above.				
Riparian monitoring	No established monitoring studies.				
Upland monitoring	No established monitoring studies.				
Restricted grazing, necessary actions:	same as existing				
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
other actions					
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
public land AUMS canceled					
Other actions					

4094 Dry Creek

Location:	Segment 6	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of river.		
AUMS within lease:	25			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	200	public	120
Riparian management in 1988	No river bank			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4080 South Stonehill

Location:	Segment 6	River Miles 4.5 - 5.5		
Category:	C			
AUMS within lease:				
Miles of river bank	private	1.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	560	public	400
Riparian management in 1988	Unknown			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4127 Kimberly

Location:	Segment 6	River Miles 1.0 - 1.5		
Category:	C			
AUMS within lease:	40			
Miles of river bank	private	0.2	public	0.3
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	40	public	240
Riparian management in 1988	exclusion			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4037 Juniper

Location:	Segment 6	River Miles 4.8 - 5.4		
Category:	C			
AUMS within lease:	40			
Miles of river bank	private	0.6	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	620	public	400
Riparian management in 1988	exclusion			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	same as existing.				
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
other actions					
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
public land AUMS canceled					
Other actions					

4031 Coyote Fields

Location:	Segment 6	River Miles 8.0 - 9.2		
Category:	C			
AUMS within lease:	20			
Miles of river bank	private	1.2	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1956	public	160
Riparian management in 1988	unknown			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4030 Powersite

Location:	Segment 6	River Miles 5.0 - 6.2		
Category:	C			
AUMS within lease:	20			
Miles of river bank	private	1.2	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	130	public	120
Riparian management in 1988	unknown			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4025 Portuguese

Location:	Segment 6	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	27			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	453	public	160
Riparian management in 1988	no river bank in allotment			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4011 CG

Location:	Segment 6	River Miles 12.0 - 12.8		
Category:	C			
AUMS within lease:	31			
Miles of river bank	private	1.5	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1560	public	240
Riparian management in 1988	unknown			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4009 Birch Creek

Location:	Segment 6	River Miles 3.0 - 9.0		
Category:	C			
AUMS within lease:	368			
Miles of river bank	private	4.8	public	1.2
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	4840	public	3169
Riparian management in 1988	season long			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the December 15 to May 1 period.			
No Riparian Grazing miles of fence	private	6.0	public	2.3
acres excluded	private	764	public	193
other actions	cancellation of 19 AUMS			
No Grazing: miles of fence	private	6.0	public	2.3
acres excluded	private	764	public	193
public land AUMS canceled	19			
Other actions				

4035 Rim

Location:	Segment 6	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	41			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	90	public	80
Riparian management in 1988	no river bank			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4178 Cheatgrass

Location:	Segment 6	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	4			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	165	public	40
Riparian management in 1988	no river bank in allotment			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4069 Big Spring

Location:	Segment 6	River Miles allotment contains on river bank, but			
Category:	C	lies within 1/4 mile of the river.			
AUMS within lease:	17				
Miles of river bank	private	0.0	public	0.0	
Acres within WSR boundaries	private	0	public	0	
Acres within allotment	private	1420	public	80	
Riparian management in 1988	no river bank in allotment				
NEPA documents	none				
Riparian management in 1999	same as above.				
Riparian monitoring	No established monitoring studies.				
Upland monitoring	No established monitoring studies.				
Restricted grazing, necessary actions:	same as existing.				
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
other actions					
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
public land AUMS canceled					
Other actions					

4185 Cockran Creek

Location:	Segment 6	River Miles 9.2 - 10.6		
Category:	C			
AUMS within lease:	16			
Miles of river bank	private	1.4	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1241	public	160
Riparian management in 1988	unknown			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4012 River

Location:	Segment 6	River Miles 16.8 - 18.0		
Category:	C			
AUMS within lease:	13			
Miles of river bank	private	1.0	public	0.8
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	140	public	135
Riparian management in 1988	Exclusion on 0.8 miles of river bank due to topographic barriers and fencing on adjacent lands.			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4082 Jack-of-Clubs

Location:	Segment 6	River Miles 16.3 - 18.6		
Category:	C			
AUMS within lease:	25			
Miles of river bank	private	1.5	public	0.9
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1350	public	200
Riparian management in 1988	Exclusion.			
NEPA documents	none.			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.				
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
other actions					
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
public land AUMS canceled					
Other actions					

4003 Slickear Mt.

Location:	Segment 7	River Miles 21.5 - 25.0, 25.2 - 31.8		
Category:	M			
AUMS within lease:	537			
Miles of river bank:	private	3.0	public	7.1
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	28,300	public	3,274
Riparian management in 1988:	season long			
NEPA documents:	none			
Riparian management in 1999:	Since 1993 the riparian pastures have been grazed from March 15 to May 15. In 1999 a fall treatment, Oct. 1 until Nov. 30, will be applied. In the following years the March 15 to May 15 treatment will be followed.			
Riparian monitoring:	No established monitoring studies.			
Upland monitoring:	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the March 15 to May 15 period.			
No Riparian Grazing miles of fence:	private	1.3	public	6.3
acres excluded:	private	15	public	20
other actions:	none			
No Grazing miles of fence:	private	4.0	public	10.0
acres excluded:	private	200	public	620
Public land AUMS canceled:	41			
Other actions:	none			

4028 Neale Butte

Location:	Segment 7	River Miles 20.9-27.7		
Category:	C			
AUMS within lease:	119			
Miles of river bank:	private	6.0	public	4.0
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	1,810	public	712
Riparian management in 1988:	season long			
NEPA documentation:	95-016			
Riparian management in 1999:	Spring grazing on 2.4 miles of public and 1.4 miles of private river bank and season long grazing on 1.6 miles of public and 4.6 miles of private river bank.			
Riparian monitoring:	No established monitoring studies.			
Upland monitoring:	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to June 1 period. Develop allotment management plan.			
No Riparian Grazing miles of fence:	private	3.2	public	1.2
Acres excluded:	private	19	public	7
Other actions	none			
No Grazing: miles of fence:	private	3.7	public	1.7
Acres excluded	private	592	public	160
Public land AUMS canceled:	16			
Other actions:	none			

4029 North Fork

Location:	Segment 7	River Miles 30.1-40.3		
Category:	M			
AUMS within lease:	316			
Miles of river bank:	private	11.3	public	9.1
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	5,505	public	1,894
Riparian management in 1988:	Season long			
NEPA documents:	None			
Riparian management in 1999:	April 1 to May 31.			
Riparian monitoring:	Photo point at river mile 35, established in 1995, and reread in 1996, 1997, and 1998. Pasture was grazed season long, is now grazed during the spring. Photos show an increase in herbaceous vegetation.			
Upland monitoring:	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing; miles of fence:	private	11.3	public	9.1
Acres excluded:	private	68	public	55
Other actions:	none			
No Grazing: miles of fence:	private	11.8	public	9.6
Acres excluded:	private	896	public	720
Public land AUMS canceled:	72			
Other actions:	none			

6532 Doherty

Location:	Segment 7	River Miles 49.5-55.2		
Category:	C			
AUMs within lease:	196			
Miles of river bank	private	7.9	public	3.5
Acres within WSR boundaries	private	280	public	200
Acres within allotment	private	4120	public	2015
Riparian management in 1988	Season long			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	none			
Upland monitoring	none.			

Restricted grazing, necessary actions:	adjust the lease to confine authorized use within the dates of November 1 to June 1 on pastures with access to river riparian zones. Dates of actual use will be determined by herd size and available forage, but will normally be for less than 90 days within the November 1 to June 1 period.				
No Riparian Grazing miles of fence	private	7.9	public	3.5	
acres excluded	private	48	public	18	
other actions	None				
No Grazing: miles of fence	private	7.9	public	3.5	
acres excluded	private	280	public	200	
public land AUMs cancelled	20				
Other actions	none				

6549 Healy

Location:	Segment 7	River Miles		40.5-48.0
Category:	C			
AUMs within lease:	107			
Miles of river bank	private	6.5	public	.5
Acres within WSR boundaries	private	820	public	140
Acres within allotment	private	4,000	public	1,007
Riparian management in 1988	Season long			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	none			
Upland monitoring	none.			

Restricted grazing, necessary actions:	adjust the lease to confine authorized use within the dates of November 1 to June 1 on pastures with access to river riparian zones. Dates of actual use will be determined by herd size and available forage, but will normally be for less than 90 days within the November 1 to June 1 period.			
No Riparian Grazing miles of fence	private	6.5	public	0.5
acres excluded	private	36	public	6
other actions	None			
No Grazing: miles of fence	private	7.0	public	1.0
acres excluded	private	820	public	140
public land AUMs cancelled	14			
Other actions	None			

4189 Morris

Location:	Segment	7	River Miles	40.0-43.7
Category:	C			
AUMs within lease:	5			
Miles of river bank	private	3.7	public	0.0
Acres within WSR boundaries	private	440	public	20
Acres within allotment	private	1,160	public	40
Riparian management in 1988	Season long			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	none			
Upland monitoring	None .			

Restricted grazing, necessary actions:	adjust the lease to confine authorized use within the dates of November 1 to June 1 on pastures with access to river riparian zones. Dates of actual use will be determined by herd size and available forage, but will normally be for less than 90 days within the November 1 to June 1 period.			
No Riparian Grazing miles of fence	private	3.7	public	0.0
acres excluded	private	24	public	0
other actions	None			
No Grazing: miles of fence	private	4.3	public	0.3
acres excluded	private	440	public	20
public land AUMs cancelled	2			
Other actions	None			

4125 Umatilla

Location:	Segment 7	River Miles 45.0 to 50.1		
Category:	C			
AUMS Within Lease:	113			
Miles of river bank:	private	4.1	public	1.0
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	2,020	public	679
Riparian management in 1988:	Season long			
NEPA Documents:	None			
Riparian management in 1999:	same as above.			
Riparian monitoring:	No established studies.			
Upland monitoring:	No established studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to May 31 period.			
No Riparian Grazing miles of fence:	private	4.1	public	1.0
acres excluded:	private	50	public	12
Other actions:	none			
No Grazing: miles of fence:	private	4.6	public	1.5
Acres excluded:	private	656	public	160
Public land AUMS canceled:	16			
Other actions:	none			

4042 Johnny Cake Mtn.

Location:	Segment 7	River Miles 27.7-30.2		
Category:	C			
AUMS within lease:	30			
Miles of river bank:	private	1.5	public	1.0
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	1,040	public	280
Riparian management in 1988:	Spring			
NEPA documents:	none			
Riparian management in 1999:	same as above			
Riparian monitoring:	No established monitoring studies.			
Upland monitoring:	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to May 31 period.			
No Riparian Grazing miles of fence:	private	1.5	public	1.0
Acres excluded:	private	18	public	12
Other actions:	none			
No Grazing: miles of fence:	private	2.0	public	1.5
Acres excluded:	private	240	public	160
Public land AUMS canceled:	16			
Other actions:	none			

4083 19-20

Location:	Segment 7	River Miles	19.8-20.9	
Category:	I			
AUMS within lease:	26			
Miles of river bank:	private	0.8	public	0.6
Acres within WSR boundaries:	private	0	public	0
Acres within allotment:	private	688	public	160
Riparian management in 1988:	Season long			
NEPA documents:	None			
Riparian management in 1999:	Spring			
Riparian monitoring:	No established monitoring studies.			
Upland monitoring:	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to May 31 period.			
No Riparian Grazing miles of fence:	private	0.8	public	0.6
Acres excluded:	private	10	public	7
Other actions:	none			
No grazing; miles of fence:	private	1.3	public	1.1
Acres excluded	private	128	public	96
Public land AUMS canceled:	10			
Other actions:	none			

4139 Bone Yard

Location:	Segment 7	River Miles allotment contains no river bank, but lies within 1/4 mile of river.		
Category:	C			
AUMS within lease:	148			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	19,300	public	1400
Riparian management in 1988	no miles of river bank in allotment			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	Trend plot (3x3 photoplot) established in 1989 and remeasured in 1995. Authorized grazing is 9/30 - 11/30, monitoring shows a decrease in *Festuca idahoensis*.			
Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4122 Big Bend

Location:	Segment 7	River Miles 24.7 - 25.7		
Category:	C			
AUMS within lease:	25			
Miles of river bank	private	0.2	public	0.8
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	360	public	280
Riparian management in 1988	season long			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.				
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
other actions					
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
public land AUMS canceled					
Other actions					

4089 East Monument

Location:	Segment 7	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	52			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	620	public	360
Riparian management in 1988	no river bank within allotment			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4027 Top Road

Location:	Segment 7	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	9			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	-	public	50
Riparian management in 1988	no river bank on allotment			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4015 Mud Springs

Location:	Segment 7	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	30			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	-	public	240
Riparian management in 1988	no river bank			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4169 Sheepshed Canyon

Location:	Segment 7	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	13			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	4800	public	80
Riparian management in 1988	no river bank			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4135 Gibson Creek

Location:	Segment 9	River Miles 15.0 - 15.2		
Category:	C			
AUMS within lease:	20			
Miles of river bank	private	0.0	public	0.2
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	1480	public	120
Riparian management in 1988	season long			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to May 31 period. Pursue opportunities to exchange lands adjacent to river for other lands within the WSR.			
No Riparian Grazing miles of fence	private	0.0	public	0.2
acres excluded	private	0	public	5
other actions				
No Grazing: miles of fence	private	0.0	public	1.2
acres excluded	private	0	public	40
public land AUMS canceled	6			
Other actions				

4046 Three Mile

Location:	Segment 9	River Mile 4.9 - 7.0		
Category:	C			
AUMS within the lease:	8			
Miles of river bank:	private	3.4	public	0.8
Acres within WSR boundaries:	private	0	public	0
Acres within the allotment:	private	2,174	public	80
Riparian management in 1988:	season long			
NEPA documents:	None			
Riparian management in 1999:	Same as above			
Riparian monitoring:	No established riparian monitoring studies.			
Upland monitoring:	Trend plot (3 ft. X 3 ft.) established in 1989. Study shows an increase in the number of and vigor of *Agropyron spicatum* plants			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to April 1 to May 31 period. Pursue opportunities to develop an allotment management plan or to exchange lands adjacent to river for other lands within the WSR.			
No Riparian Grazing, miles of fence:	private	0	public	0.8
acres excluded:	private	0	public	40
other actions:	cancellation of 3 AUMs			
No Grazing: miles of fence:	private	0	public	0.8
acres excluded	private	0	public	40
Public land AUMS's canceled:	3			
Other actions:	none			

4014 Middle Fork

Location:	Segment 9	River Miles 33.0 - 36.0, 36.8 - 37.0		
Category:	C			
AUMS's Within Lease:	77			
Miles of river bank:	private	5.8	public	0.7
Acres Within WSR boundaries:	private	0	public	0
Acres Within allotment	private	15,952	public	562
Riparian management in 1988:	season long			
NEPA documents:	none			
Riparian management in 1999:	same as above.			
Riparian monitoring:	No established monitoring studies.			
Upland monitoring:	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 1 to May 31 period. Pursue opportunities to develop an allotment management plan or to exchange lands adjacent to river for other lands within the WSR.			
No Riparian Grazing, miles of fence:	private	0	public	0.5
acres excluded:	private	0	public	100
Other actions:	cancellation of 10 AUMS			
No Grazing: miles of fence:	private	0	public	0.5
Acres excluded:	private	0	public	100
Public land AUMS's canceled:	10			
Other actions:	none			

4038 Dayville

Location:	Segment 10	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	141			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	0	public	0
Acres within allotment	private	2960	public	1640
Riparian management in 1988	No river bank in allotment.			
NEPA documents	none			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	same as existing.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

4020 Murderers Creek

Location:	Segment 10 River Miles 6.3 - 12.2 and 24.5 - 25.2					
Category:	M					
AUMS within lease:	860					
Miles of river bank	private	0.0	public	5.2	state	8.0
Acres within WSR boundaries	private	479	public	1998	state	390
Acres within allotment	private	2250	public	16,004	state	15,989
Riparian management in 1988	exclusion of 5.4 river bank miles and spring grazing on 7.8 miles					
NEPA documents	89-054, 93-100, 94-083, 96-075					
Riparian management in 1999	exclusion of 5.4 river bank miles and rotation (spring and non-use) on 7.8 miles.					

Riparian monitoring

Photopoint at river mile 6.4, in the Munjar pasture, established in 1979 and remeasured in 1990. Grazing was excluded, recreation impacts are noted, banks have stabilized, cottonwood trees have disappeared, shrub and herbaceous layers have widened.

Photopoint at river mile 7.5, in the Munjar pasture, established in 1980 and remeasured in 1990. Grazing was excluded, some erosion and downcutting has occurred, but willows have expanded, herbs, alders and cottonwoods were becoming established.

Photopoint at river mile 9.1, in the River pasture, established in 1979 and remeasured in 1990. Grazing was rest - spring rotation, banks are healing,, willows have expanded, cottonwood and alder have established.

Photopoint at river mile 9.8, in River pasture, established in 1979 and remeasured in 1990. Grazing was rest - spring rotation, banks have stabilized and vegetated. Willow, alder and cottonwood recruitment was noted.

Photopoint at river mile 10.1, in River pasture, established in 1980 and remeasured in 1990. Grazing was rest - spring rotation, banks have healed, woody vegetation was described as sparse though pictures show vigorous herbaceous and woody species.

Upland monitoring

Trend plot (3x3 Photo point) in Munjar pasture was established in 1976 and remeasured in 1988 and 1990. See riparian management above, *Chrysothamnus sp.* has decreased.

Trend plot (line intercept) in Munjar pasture was established in 1992 and remeasured in 1993 and 1998. *Agropyron spicatum* has increased.

Trend plot (3x3 Photo point) in River pasture was established in 1976 and remeasured in 1988, 1990, and 1998. See riparian management above, no change is obvious.

Trend plot (line intercept) in River pasture was established in 1990 and remeasured in 1998. *Chrysothamnus sp.* has decreased.

Trend plot (line intercept) in River pasture was established in 1993 and remeasured in 1998. *Gutierrezia sarothrae* has decreased in vigor and *Agropyron spicatum* has increased.

Trend plot (3x3 photoplot) in River pasture was established in 1993 and remeasured in 1998. *Agropyron spicatum* and *Festuca idahoensis* have increased in vigor and *Chrysothamnus sp.* has decreased.

Trend plot (line intercept) in Cow Gulch pasture was established in 1976 and remeasured in 1988, 1989, 1994 and 1998. Grazing every June changed in 1992 to a rest rotation, an increase in *Agropyron spicatum* and *Sitanion hystrix* has occurred. An extirpation of *Purshia tridentata* occurred in the early 1980s due to an infestation of grasshoppers.

Trend plot (3x3 Photo point) in Cow Gulch pasture was established in 1976 and remeasured in 1988, 1990 and 1998. *Sitanion hystrix* has

increased.
Trend plot (line intercept) in Cow Gulch pasture was established in 1990 and remeasured in 1998. *Sitanion hystrix* has increased.
Trend plot (3x3 photoplot) in Cow Gulch pasture was established in 1992 and remeasured in 1993 and 1998. *Agropyron spicatum* has increased.
Trend plot (line intercept) in Jackass pasture was established in 1988 and remeasured in 1989 and 1994. See riparian management above, *Gutierrezia sarothrae* increased and *Agropyron spicatum* decreased.
Trend plot (line intercept) in Cougar Gulch pasture was established in 1988 and remeasured in 1989 and 1990. See management for Cow Gulch pasture, *Festuca idahoensis* increased.
Trend plot (3x3 photoplot) in Cougar Gulch pasture was established in 1988 and remeasured in 1990. No change was obvious.

Restricted grazing, necessary actions:	same as existing						
No Riparian Grazing	miles of fence	private	0.0	public	3.8	state	4.0
	acres excluded	private	0.0	public	35.0	state	36
	other actions						
No Grazing:	miles of fence	private	0.4	public	5.4	state	1.7
	acres excluded	private	188	public	3057	state	828
	public land AUMS canceled	private	8	public	146	state	36
	Other actions	none					

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4186 Big Flats

Location:	Segment 10 River Miles 34.4-36.1			
Category:	I			
AUMS within lease:	71			
Miles of river bank	private	1.2	public	2.0
Acres within WSR boundaries	private		public	
Acres within allotment	private	720	public	900
Riparian management in 1988	season long on 1.6 miles of public riverbank and spring grazing on 0.4 miles of public and 2.0 miles of private riverbank.			
NEPA documents	None			
Riparian management in 1999	Exclusion on 1.6 miles of public riverbank, the pasture with 0.4 miles of public riverbank facilitates livestock movement between Big Baldy and the rest of the Big Flats allotments and is grazed June 1 to June 15,			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	Trend plot(3 ft. X 3 ft.) photoplot established in 1988 and reread in 1993 and 1998 Livestock graze the pasture during the spring. Monitoring shows an increase in forbs with no increase in *Agropyron spicatum.*. Trend plot (3 ft. X 3 ft.) photoplot established in 1988 and reread in 1998. Livestock graze the pasture during the spring. Monitoring shows an increase in ground cover and no increase in *Festuca idahoensis*.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of June 1 to June 15 on pastures with access to riverbank.			
No Riparian Grazing miles of fence	private	1.2	public	0.4
acres excluded	private	24	public	4
other actions	None			
No Grazing: miles of fence	private	3.0	public	4.0
acres excluded	private	260	public	310
public land AUMS canceled	31			
Other actions	None			

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4119 Black Canyon

Location:	Segment 10	River Miles		12.3-13.5	
Category:	C				
AUMS within lease:	188				
Miles of river bank	private	2.4	public	0.0	
Acres within WSR boundaries	private	370	public	20	
Acres within allotment	private	2,880	public	944	
Riparian management in 1988	No riverbank on public land.				
NEPA documents	None				
Riparian management in 1999	Exclusion.				
Riparian monitoring	No established monitoring studies.				
Upland monitoring	No established monitoring studies.				
Restricted grazing, necessary actions:	same as existing				
No Riparian Grazing miles of fence	private	n/a	public	n/a	(same as existing)
acres excluded	private		public		
other actions	None				
No Grazing: miles of fence	private	3.0	public	0.8	
acres excluded	private	80	public	10	
public land AUMS canceled	1				
Other actions	None				

4124 Smokey Creek

Location:	Segment 10 River Miles 2.9 -3.9, 5.2 - 5.8			
Category:	I			
AUMS within lease:	307			
Miles of river bank	private	3.0	public	0.2
Acres within WSR boundaries	private		public	
Acres within allotment	private	2,160	public	2,213
Riparian management in 1988	Topography and fencing on the adjacent private lands limits the grazing on the 0.2 miles of riverbank. Grazing has been spring grazing if the livestock drift into the area.			
NEPA documents	None			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	Trend plot(3 ft. X 3 ft. photoplot) established in the Gray Gulch pasture in 1969 and reread in 1970, 1971, 1972, 1977, 1989, and 1995. Pasture has been rested for the last two years. Monitoring shows an increase in ground cover and *Agropyron cristatum*. Line intercept(frequency) study established in the Gray Gulch pasture in 1989 and reread in 1995. Pasture has been rested for two years. Monitoring shows an increase in the frequency of *Agropyron cristatum*. Trend plot(3 ft. X 3 ft. photoplot) established in the Smokey Creek pasture in 1969 and reread in 1970, 1971, 1972, 1977, 1989, and in 1995. Pasture has been rested for the past two years. Monitoring shows no increase in perennial herbaceous vegetation Line intercept(frequency) study established in the Smokey Creek pasture in 1989. Study has not been reread. Trend plot(3 ft. X 3 ft. photoplot) established in the Smokey Creek pasture in 1969 and reread in 1970, 1971, 1972, 1977, 1989, and 1995. Pasture has been rested for the last two years. Monitoring shows an increase in *Stipa thurberiana*. Line intercept(frequency) study established in the Smokey Creek pasture in 1989 and reread in 1995. Pasture has been rested for two years. Monitoring shows an increase in the frequency of *Agropyron spicatum*. Trend plot(3 ft. X 3 ft. photoplot) established in the Gray Gulch pasture in 1972 and reread in 1989 and 1995. Pasture has been rested for two years. Monitoring shows the ground cover and *Agropyron cristatum*. Line intercept(frequency) study established in the Gray Gulch pasture in 1989 and reread in 1995. Pasture has been rested for two years. Monitoring shows an increase in the frequency of *Agropyron cristatum* and *Sitanion hystrix*.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 15 to May 31 period.			
No Riparian Grazing miles of fence	private	3.0	public	0.2
acres excluded	private	36	public	3
other actions	None			
No Grazing: miles of fence	private	3.0	public	0.2
acres excluded	private	480	public	32
public land AUMS canceled	2			
Other actions	None			

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4052 Big Baldy

Location:	Segment 10	River Miles 26.0-34.5		
Category:	I			
AUMS within lease:	600			
Miles of river bank	private	9.6	public	7.4
Acres within WSR boundaries	private	960	public	3411
Acres within allotment	private	3,090	public	11,132
Riparian management in 1988	Season-long			
NEPA documents	88-011, 89-027, 92-032			

Riparian management in 1999: There are two pastures within the allotment boundary. One pasture is rested and one pasture is grazed from April 15 until May 31. The next year the rotation is reversed.

Riparian monitoring: Photo point was established in the North Pasture in 1995 and reread in 1996, 1997, and 1998. Livestock did not graze the pasture in 1995, 1997, and will not graze the pasture in 1999. Livestock grazed the pasture in 1996 and 1998 from April 15 until May 31 Monitoring shows the herbaceous vegetation has been maintained and maintenance of the willow canopy.

Photo point was established in the North Pasture at river mile 29.5 in the North Pasture in 1995 and reread in 1996, 1997, and 1998. Livestock did not graze the pasture in 1995, 1997, and will not graze the pasture in 1999. Livestock grazed the pasture in 1996 and 1998 from April 15 until May 31. Monitoring shows maintenance of the herbaceous ground cover and the shrub canopy.

Photoplot established in 1995 in the South Pasture at river mile 33.8 and reread in 1996, 1997, 1998. Livestock did not graze the pasture in 1996 and 1998. Livestock grazed the pasture in 1995, 1997, and will graze the pasture in 1999 from April 15 until May 31. Monitoring shows maintenance of the herbaceous ground cover and the shrub canopy.

Upland monitoring: Trend plot(3 X 3 photoplot) established in the North Pasture in 1988 and reread in 1993 and 1998. Livestock did not graze the pasture in 1995, 1997, and will not graze the pasture in 1999. Livestock grazed the pasture in 1996 and 1998 from April 15 until May 31. Monitoring showed an increase in *Festuca idahoensis*.

Trend plot(3 X 3 photoplot) established in the South Pasture in 1993. Trend plot has not been remeasured.

Trend plot(3 X 3 photoplot) established in the South Pasture in 1989 and reread in 1994. Livestock did not graze the pasture in 1996 and 1998. Livestock grazed the pasture in 1995, 1997, and will graze the pasture in 1999 from April 15 until May 31 Monitoring shows an increase in *Lupinus sp.* and herbaceous ground cover

Line intercept(frequency) study established in the South Pasture in 1989 and reread in 1994. Livestock did not graze the pasture in 1996 and 1998. Monitoring shows a decrease in the frequency of *Agropyron spicatum* and *Sitanion hystrix*.

Trend plot(3 ft. X 3 ft. photoplot) established in the North Pasture in 1989 and reread in 1994. Livestock did not graze the pasture in 1995, 1997, and will not graze the pasture in 1999. Livestock grazed the pasture in 1996 and 1998 from April 15 until May 31. Monitoring showed an increase in herbaceous ground cover and *Agropyron spicatum*.

Line intercept(frequency) study was established in the North Pasture in 1989 and reread in 1994. Livestock did not graze the pasture in 1995, 1997, and will not graze the pasture in 1999. Livestock grazed the pasture in 1996 and 1998 from April 15 until May 31. Monitoring showed an increase in the frequency of *Agropyron spicatum*.

Trend plot(3 ft. X 3 ft. photoplot) established in the South Pasture in 1993 and reread in 1998. Livestock did not graze the pasture in 1996 and 1998. Livestock grazed the pasture in 1995, 1997, and will graze the pasture in 1999 from April 15 until May 31. Monitoring showed an increase in forbs.

Restricted grazing, necessary actions:	same as existing				
No Riparian Grazing miles of fence	private	8.8	public	7.2
acres excluded	private	53	public	44
other actions	None			
No Grazing: miles of fence	private	2.0	public	9.0
acres excluded	private	470	public	2780
public land AUMS canceled	278			
Other actions	None			

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4103 Rockpile

Location:	Segment 10	River Miles 15.2-26.0		
Category:	I			
AUMS within lease:	928			
Miles of river bank	private	9.8	public	11.8
Acres within WSR boundaries	private	1067	public	2470
Acres within allotment	private	4199	public	5618
Riparian management in 1988	Season long			
NEPA documents	88-011, 90-069, 91-004, 92-050, 97-040			

Riparian management in 1999: Spring grazing (April 15-May 31) or rest on 8.8 miles of public and 7.8 miles of private riverbank, season long on 2.0 miles of private riverbank and 8 days during the summer on 3.0 miles of public river bank.

Riparian monitoring: Photo point established in 1979 at river mile 17.5 and retaken in 1997 and 1998 in the North Corridor pasture. Livestock will not graze pasture in 1999. Photos show a dramatic increase in the bank stability, creation of islands in the middle of the South Fork John Day River, herbaceous ground cover on the banks, and the shrub canopy
Photo point established in 1979 at river mile 23.1 and retaken in 1997 in the River pasture. Livestock have grazed this pasture for four days during the summer. Photos show that the old river channel has been filled in by herbaceous vegetation.
Photo point established in 1979 at river mile 25 and retaken in 1997. Pasture will be grazed during the spring in 1999. Photos show the bank stabilizing and herbaceous ground cover on the banks
Photo point established in 1979 at river mile 24.9 and retaken in 1997. Livestock will graze the pasture during the spring. Photos show that the banks were revegetated with herbaceous vegetation and the banks stabilized.

Upland monitoring: Trend plot(3 ft. X 3 ft. photoplot) established in the Frazier Creek pasture in 1989 and reread in 1994 and 1998. Livestock grazed the pasture in late fall in 1998 and will graze the pasture in the late fall in 1999. Monitoring shows an increase in *Agropyron spicatum* and *Poa secunda*.
Line intercept(frequency) study established in the Frazier Creek pasture in 1989 and reread in 1994 and 1998. Livestock grazed the pasture in late fall in 1998 and will in 1999. Monitoring shows an increase of *Agropyron spicatum* and *Festuca idahoensis*.
Trend plot(3 ft. X 3 ft. photoplot) established in the Martin Creek pasture in 1989 and reread in 1994. Livestock have grazed the pasture in the late fall for the last two years. Monitoring shows no increase or decrease in *Agropyron spicatum*.
Line intercept(frequency) study established in the Martin Creek pasture in 1989 and reread in 1994. Monitoring shows an increase in the frequency of *Agropyron spicatum*.
Trend plot(3 ft. X 3 Ft. photoplot) established in the River Pasture in 1989 and reread in 1994. Livestock graze the pasture for 8 days during the summer. Monitoring showed a static trend in vegetation.
Line intercept(frequency0 study established in the River Pasture in 1989 and reread in 1994. Livestock graze the pasture for 8 days during the summer. Monitoring shows a decrease in the frequency of *Agropyron spicatum*.
Trend plot(3 ft. X 3 ft. photoplot).established in the Martin Creek Pasture in 1994 and reread in 1998. Livestock have grazed the pasture during the fall for the last two years. Monitoring shows an increase in the ground cover and *Sitanion hystrix*.
Trend plot(3 ft. X 3 ft. photoplot). established in the Frazier Creek

pasture in 1993 and reread in 1998. Livestock have grazed the pasture during the fall for the last two years. Monitoring shows an increase in ground cover and decrease in forbs.
Trend plot(3 ft. X 3 ft. photoplot) established in the Doghouse Pasture in 1993 and reread in 1998. Livestock grazed the pasture in the spring in 1998 and in 1999 the pasture will be rested. Monitoring shows very little change in ground cover or vegetation.
Trend plot(3 ft. X 3 ft. photoplot) established in the Flats Pasture in 1993 and reread in 1998. Livestock graze the pasture during the spring. Monitoring shows a decrease in *Agropyron spicatum* and an increase in *Bromus tectorum*.
Line intercept(frequency)study established in the Flats Pasture in 1993 and reread in 1998. Livestock graze the pasture during the spring. Monitoring shows an increase in *Poa secunda*, an increase *in Sitanion hystrix*, a decrease in *Agropyron spicatum*, and an increase in *Festuca idahoensis*.

Restricted grazing, necessary actions:	same as existing		
No Riparian Grazing miles of fence	private	9.8	public 11.8
acres excluded	private	60	public 143
other actions	None		
No Grazing: miles of fence	private	3.0	public 14.0
acres excluded	private	840	public 2780
public land AUMS canceled	278		
Other actions	none		

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4104 South Fork

Location:	Segment 11	River Miles 48.8 - 52.8		
Category:	C			
AUMS Within Lease:	215			
Miles of River bank:	private	7.9	public	0.1
Acres Within WSR boundaries:	private	592	public	80
Acres within allotment:	private	5,640	public	1,075
Riparian Management in 1988:	season long			
NEPA documents:	none			
Riparian management in 1999:	winter			
Riparian monitoring:	No established riparian studies.			
Upland monitoring:	No established upland studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to 60 days during the November 15 to April 15 period.			
No Riparian Grazing miles of fence:	private	7.9	public	0.1
Acres excluded:	private	96	public	1
Other actions:				
No Grazing: miles of fence:	private	6.0	public	0.8
Acres excluded:	private	600	public	80
Public land AUMS's canceled:	8			
Other actions:				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4044 Soda Creek

Location:	Segment 11	River Miles 42.8 - 45.0		
Category:	I			
AUMS within lease:	309			
Miles of river bank:	private	4.4	public	0.0
Acres within WSR boundaries:	private	451	public	0
Acres within allotment:	private	2,080	public	2,023
Riparian management in 1988:	season long			
NEPA Documents:	90-008			
Riparian management in 1999:	exclusion			

Riparian monitoring: Photo point established in 1995 on Dry Soda Creek, and reread in 1996, 1997, and 1998. Photos show an increase in herbaceous ground cover. Beginning in 1992 the pasture has been grazed early spring or late summer(after mid-August) each year.

Upland monitoring: Trend plot (3 ft. X 3 ft.) was established in 1989, and reread in 1995 in the Wildcat Pasture. Beginning in 1995 the pasture has been grazed in the spring, summer, or fall for four weeks. Photos show an increase in the vigor of the *Festuca idahoensis*.

Line intercept(frequency) was established in 1989, and reread in 1995 in the Wildcat Pasture. Beginning in 1992 the pasture has been grazed in the spring, summer, or fall for four weeks. Monitoring shows an increase in the frequency of *Festuca idahoensis* and *Agropyron spicatum*.

Trend plot(3 ft. X 3 ft.) was established in 1989 and reread in 1995 in the Poison Creek pasture. Pasture has been grazed during the spring since 1992. The monitoring shows no change in *Festuca idahoensis* and *Agropyron spicatum*.

Line intercept(frequency) was established in 1989 and reread in 1995 in the Poison Creek pasture. Beginning in 1992 the pasture has been grazed the spring. Monitoring shows an increase in the frequency of *Festuca idahoensis* and *Agropyron spicatum*.

Trend plot(3 ft. X 3ft.) was established in 1989 and reread in 1995 in the Snake Den pasture Since 1992 the pasture has been grazed at various times for three weeks during the grazing season. Monitoring shows a decrease in perennial plants.

Line intercept(frequency) was established in 1989 and reread in 1995 in the Snake Den Pasture. Since 1992 the pasture has been grazed at various times for three weeks during the grazing season. Monitoring shows a decrease in *Elymus* and an increase in *Agropyron spicatum*.

Restricted grazing, necessary actions:	same as existing			
No Riparian grazing miles of fence:	private:	n/a	public	n/a (same as existing)
acres excluded:	private:		public:	
other actions:	none			
No Grazing: miles of fence:	private:	n/a	public:	n/a (same as existing)
acres excluded:	private:		public:	
public land AUMS's canceled:				
other actions:				

4155 Blackhorse Draw

Location:	Segment 11	River Miles 47.0 -47.8		
Category:	I			
AUMS within lease:	159			
Miles of river bank	private	1.5	public	0.0
Acres within WSR boundaries	private	93	public	55
Acres within allotment	private	3,480	public	760
Riparian management in 1988	season long			
NEPA documents	89-022			
Riparian management in 1999	summer			
. Riparian monitoring	Riparian photoplot established in the Utley Creek pasture in 1990 and reread every year since 1990. Livestock graze the pasture during the spring. Monitoring shows an increase in *Salix* and herbaceous vegetation.			
Upland monitoring:	Trend plot (3 ft. X 3 ft.) established in 1989 and reread in 1993 and in 1995. Livestock graze the pasture during the spring. Monitoring shows an increase in *Poa* and a decrease in *Stipa comata.*			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 15 to May 15 period.			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions:				
No Grazing: miles of fence	private	1.4	public	1.0
acres excluded	private	40.0	public	60.0
Public land AUMS canceled	8			
Other actions				

4067 Sheep Creek Butte

Location:	Segment 11 River Miles 40.2 - 42.8, 45.0 - 47.0, 47.8 - 48.8			
Category:	C			
AUMS within lease:	957			
Miles of river bank	private	10.6	public	0.6
Acres within WSR boundaries	private	814	public	310
Acres within allotment	private	16,360	public	4733
Riparian management in 1988	Summer			
NEPA documents	93-028			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	Trend plot (3 ft. X 3 ft.)established in 1989 near Don's Butte and reread in 1995. Livestock have grazed the pasture in the spring or late fall. Monitoring shows an increase in *Festuca idahoensis* and *Sitanion hystrix* and a decrease in *Agropyron spicatum*. Line intercept (frequency) study established in 1989 and reread in 1995 near Don's Butte. Livestock have grazed the pasture in the spring or late fall. Monitoring shows an increase in *Festuca idahoensis* and *Sitanion hystrix*. Trend plot (3 ft. X 3 ft.) established in 1989 near Flat's Creek and reread in 1995. Livestock have grazed the pasture during late fall. Monitoring shows an increase in *Stipa comata* and *Sitanion hystrix*. Line intercept (frequency) study established in 1989 and reread in 1995 near Flat Creek. Livestock have grazed the pasture in the spring or late fall. Monitoring shows an increase in *Stipa comata* and *Sitanion hystrix.*			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of November 1 to June 1 on pastures with access to riverbank. Dates of authorized use would be determined by plant phenology, herd size and available forage, but would be restricted normally to the April 15 to May 31 period.			
No Riparian Grazing miles of fence	private	4.8	public	0.3
acres excluded	private	58	public	3
other actions				
No Grazing: miles of fence	private	6.2	public	3.0
acres excluded	private	480	public	280
public land AUMS canceled	28			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4106 Izee

Location:	Segment 11	River Miles 39.2 - 40.2		
Category:	C			
AUMS within lease:	240			
Miles of river bank	private	1.7	public	0.3
Acres within WSR boundaries	private	131	public	197
Acres within allotment	private	1,320	public	1,200
Riparian management in 1988	exclusion			
NEPA documents	None			
Riparian management in 1999	same as above.			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	Adjust use authorizations to prohibit grazing on public lands within riparian exclosure. Reactivation of use would be dependant upon recovery as evaluated by an interdisciplinary team and subject to management prescription to sustain functioning condition.				
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)	
acres excluded	private		public		
other actions	none				
No Grazing: miles of fence	private	1.0	public	1.0	
acres excluded	private	190	public	197	
public land AUMS canceled	20				
Other actions	None				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4186 Big Flats

Location:	Segment 11	River Miles 36.1 - 39.2		
Category:	I			
AUMS within lease:	129			
Miles of river bank	private	5.4	public	0.8
Acres within WSR boundaries	private	201	public	148
Acres within allotment	private	5,443	public	1,648
Riparian management in 1988	Late fall			
NEPA documents	None			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			
Restricted grazing, necessary actions:	Adjust the lease to confine grazing period within the dates of September 15 to November 30 on pastures with access to riverbank.			
No Riparian Grazing miles of fence	private	2.8	public	0.8
acres excluded	private	34	public	10
other actions				
No Grazing: miles of fence	private	4.0	public	2.0
acres excluded	private	180	public	140
public land AUMS canceled	14			
Other actions				

[Special Seasonal Limitations To Grazing apply, see preamble to Appendix L.]

4154 Morgan Creek

Location:	Segment 11	River Miles allotment contains no river bank, but		
Category:	C	lies within 1/4 mile of the river.		
AUMS within lease:	370			
Miles of river bank	private	0.0	public	0.0
Acres within WSR boundaries	private	140	public	0
Acres within allotment	private	2360	public	1847
Riparian management in 1988	no river bank on allotment			
NEPA documents	none			
Riparian management in 1999	same as above			
Riparian monitoring	No established monitoring studies.			
Upland monitoring	No established monitoring studies.			

Restricted grazing, necessary actions:	same as existing			
No Riparian Grazing miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
other actions				
No Grazing: miles of fence	private	n/a	public	n/a (same as existing)
acres excluded	private		public	
public land AUMS canceled				
Other actions				

Appendix M Riparian Photographs

Photo 1 July 1999. The confluence of Ferry Canyon and the John Day River at RM 53.7. The river is just beyond the far willow clump. Voluntary non-use from summer grazing has allowed development of woody and herbaceous riparian vegetation. Ferry Canyon Watershed Council promoted good management practices and upland restoration projects.

Photo 2 August 1980. Ferry Canyon and John Day confluence at RM 53.7. The river is seen in the upper half of the picture below the two prominent junipers and the cutbank. Much of the desirable riparian vegetation is absent due to summer grazing.

Photo 3 July 1999. Looking up Ferry Canyon from near the confluence with the John Day. Showing riparian improvement due to elimination of summer grazing.

Photo 4 August 1980. Looking up Ferry Canon from near the confluence with the John Day River. Much of the desirable riparian vegetation is absent due to summer grazing.

Photo 5 June 1996. The John Day River at RM 61.3. Showing the results of voluntary nonuse for six years.

Photo 6 June 1990. The John Day River at RM 61.3. Grazing usually extended from late spring into summer.

Photo 7 June 1996. The John Day River at RM 68.8. Low potential site showing no change since the 1991 photo. Continued livestock exclusion.

Photo 8 June 1991. The John Day River at RM 68.8. Low potential site showing little change after livestock exclusion since the 1950's.

Photo 9 July 1994. The John Day River at RM 100.4, showing increasing willow cover since 1990, (refer to Photo 22). Continued spring livestock use.

Photo 10 June 1990. The John Day River at RM 100.4, showing the results of riparian oriented grazing management started in 1988. Livestock graze during the spring period.

Photo 11 May 9, 1995. The John day River flowing at 10,300 cubic feet per second (cfs) at the confluence with Sorefoot Creek, RM 106.3. Showing extensive inundation of the lower banks and the riparian areas. Livestock are unable to access the riparian areas at higher flows during the spring.

Photo 12 September 9, 1995. The John Day River flowing at 162 cfs at the confluence with Sorefoot Creek, RM 106.3. Showing full exposure of the riparian areas. Livestock could access the entire river and easily cross.

Photo 13 May 10, 1995. The John Day River flowing at 10,300 cfs at the confluence with Hay Creek, RM 29.7. Showing extensive inundation of the lower banks and the riparian areas. Livestock are unable to access the riparian areas at higher flows.

Photo 14 September 14, 1995. The John Day River flowing at 162 cfs at the confluence with Hay Creek, RM 29.7. Showing full exposure of the riparian areas. Livestock could access the entire river and easily cross.

Photo 15 September 1996. Bridge Creek is a tributary to the John Day River at RM 135.3. Showing the results of short duration spring grazing practices for nine years.

Photo 16 September 1987. Bridge Greek is a tributary to the John Day River at RM 135.3. Showing the results of repeated, season long grazing use.

Photo 17 1997. The South Fork of the John Day River near Black Pine Creek. Improvement in the sedge/rush community resulting from riparian oriented grazing management. Grazing occurs for three weeks during the spring with complete rest every third year.

Photo 18 1979. The South Fork of the John Day River near Black Pine Creek. The results of season long grazing.

Photo 19 1999. The South Fork of the John Day River near Cougar Gulch. The riparian zone has improved by providing alternative livestock watering sources away from the creek and a riparian oriented grazing system which allows one month of use during the spring, or late summer, and complete rest every third year.

Photo 20 1979. The South Fork of the John Day River near Cougar Gulch. Showing the results of season long grazing.

Photo 21 July 1990. South Fork of the John Day River. A riparian oriented grazing system using spring grazing greatly increased the woody and herbaceous riparian vegetation.

Photo 22 June 1976. South Fork of the John Day River. The results of repeated summer long livestock grazing.

Photo 23 June 1998. Reverie Terrace upland vegetation study along the John Day River at RM 76.6. Showing an increase in size and number of sand dropseed grass plants. Livestock grazing was changed to spring use in 1991.

Photo 24 May 1987. Reverie Terrace upland vegetation study along the John Day River at RM 76.6. The grass in the study plot is sand dropseed. Livestock grazing occurred during the spring and summer.

Ecological Site: A particular or unique kind of land with specific physical characteristics that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation.

Ecological site (potential vegetation) = f [soil, parent material, relief, climate, biota(animals), time (time for the biotic community to approximate a dynamic equilibrium with soil and climate conditions)]

Along the John Day River there are several ecological sites that have distinct potential plant communities. Some of these sites have potential for riparian plant communities and others do not. On the John Day River system, seven riparian ecological sites have been described which support distinct potential plant communities. The sites vary greatly in their ability to support riparian vegetation.

1.0 Basalt Cliff /Ledge - This site consists of Basalt cliffs and ledges. It is generally devoid of soil. Occasionally very sparse vegetation will exist in fractures and crevices.

2.0 Colluvium - This site consists of rubble deposited by colluvial means. Fluvial forces have little to do with this landform. Boulders that have rolled into the stream are present adjacent to the site and are evident at low flow levels. Vegetation varies depending on how much fine soil material has accumulated and distance from average water flows. Hackberry is the dominant woody vegetation with mock orange present in wetter sites. Willows are generally absent at very few sites. Bunchgrass is typically not present below the mean high water mark. Reed Canary grass is common. Some emergent species tend to follow the water level as flows recede in the growing season.

3.0 Cobble/Gravel Bar - This site consists of gravel and cobble bars, including mid-channeland point bars. Bar material is highly mobile. Vegetation, when present, is typically emergent and tends to follow the waters edge as it recedes during the growing season. As a result of substrate mobility and the associated shearing action, woody species are seldom found. Some mid channel bars have willow communities that are becoming established. These bars are in locations relative to channel shape that allow energy and shearing actions to stay in a defined pattern and allow for woody species to become better established.

5.0 Terrace Edge - The formation of this site is the result of lateral stream migration into an older terrace landform. The older terrace is a remnant of the holocene period prior to the John Day adjusting to its current elevation. The top or flat part of the terrace contains upland species. This site is variable due to slope of the terrace edge, either vertical or sloping or slumping, and due to parent material of the terrace, either fine textured or coarse or a mixture of both. The substrate material composition is a factor in erosion rate (active cutbank, stable vertical bank, slumping recovering bank) which is a function of spatial location with respect to channel migration. Vegetation varies due mainly to soil texture and flow level fluctuations. Herbaceous and emergent vegetation follows water levels as it recedes during the growing season. Woody species are seldom found.

5.1 Non-Riparian Terrace Edge - This site consists of shallow soil terrace underlain by coarse fluvial substrate, typically gravel or cobble. This site is a specific subunit of the previously described terrace edge site. At low flow levels this site typically grades into gravel bars. Vegetation is limited by the lack of fine soil material and by low water holding capacity especially when water levels recede. As a result of substrate mobility and the associated shearing action, woody species are seldom found.

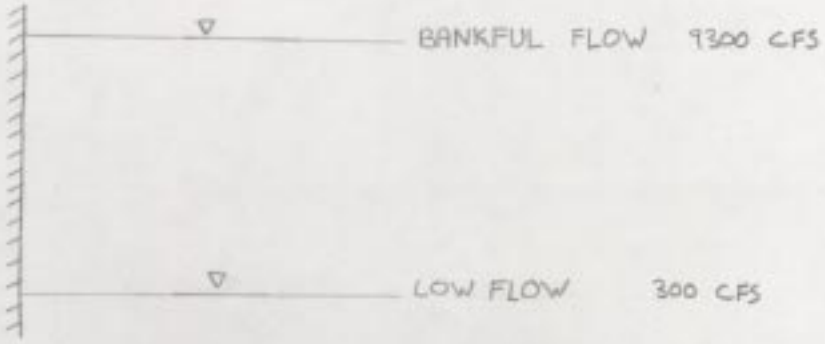
6.0 Alluvial Fan - This site forms a confluence with tributaries and canyon features. It is highly variable and groundwater relations are a key component. Coarse materials are deposited from the tributary into the main channel. Some of the coarse material is sheared from the front edge and deposited immediately downstream. Fine materials are deposited from the main channel both upstream and downstream of the coarse fan. The areas of fine soils material are subirrigated by the tributary creating a more stable water regime for plant communities. Vegetation is diverse with both herbaceous and woody vegetation present .

7.0 Hillslope - This site consists of shallow stony colluvium. What little fine soil that is included is loamy in texture. Fluvial forces have little to do with this landforrn and this site is very stable. Boulders that have rolled into the stream are present adjacent to the site and are evident at low flow levels. Vegetation varies depending on how much fine soil material has accumulated and elevation from average water flows. Hackberry is the dominant woody vegetation with mock orange present in wetter sites. Willows have only been found at very few sites. Bunchgrass is typically not present below the mean high water mark. Reed Canary grass occurs on some areas. Some emergent species tend to follow the water level as flows recede in the growing season.

JD-01.0 BASALT LEDGE / CLIFF

THIS SITE CONSISTS OF BASALT CLIFFS AND LEDGES. IT IS GENERALLY DEVOID OF SOIL. OCASSIONALLY VERY SPARSE VEGETATION WILL EXIST IN BASALT FRACTURES.

CROSS SECTION



AERIAL EXAMPLE

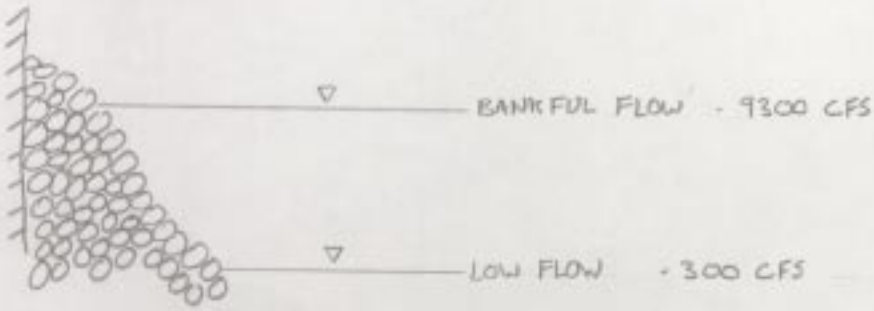
MAP EXAMPLE

PHOTO EXAMPLE

JD-02.0 COLLUVIUM

THIS SITE CONSISTS OF RUBBLE DEPOSITED BY COLLUVIAL MEANS. FLUVIAL FORCES HAVE LITTLE TO DO WITH THIS LANDFORM. BOULDERS THAT HAVE ROLLED INTO THE STREAM MAY BE PRESENT ADJACENT TO THIS SITE

CROSS SECTION



AERIAL EXAMPLE

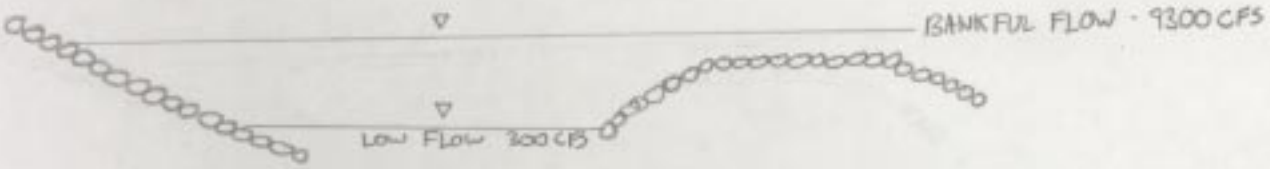
MAP EXAMPLE

PHOTO EXAMPLE

JD-03.0 COBBLE/GRAVEL BAR

THIS SITE CONSISTS OF GRAVEL AND COBBLE BARS, INCLUDING MID-CHANNEL AND POINT BARS. BAR MATERIAL IS HIGHLY MOBILE.

CROSS SECTION



AERIAL EXAMPLE

MAP EXAMPLE

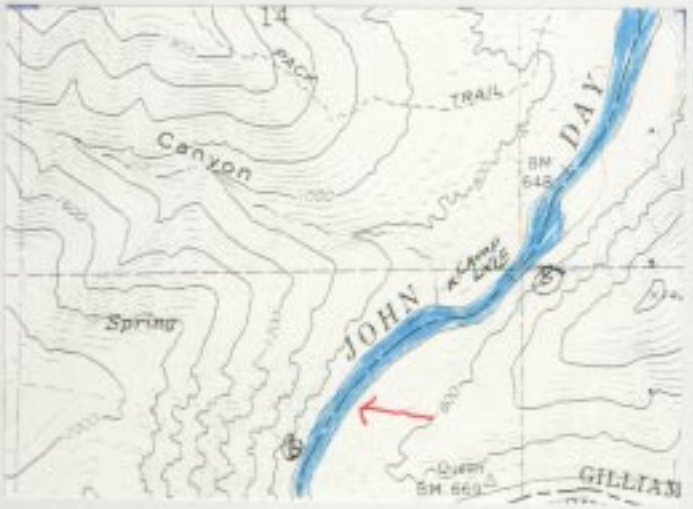
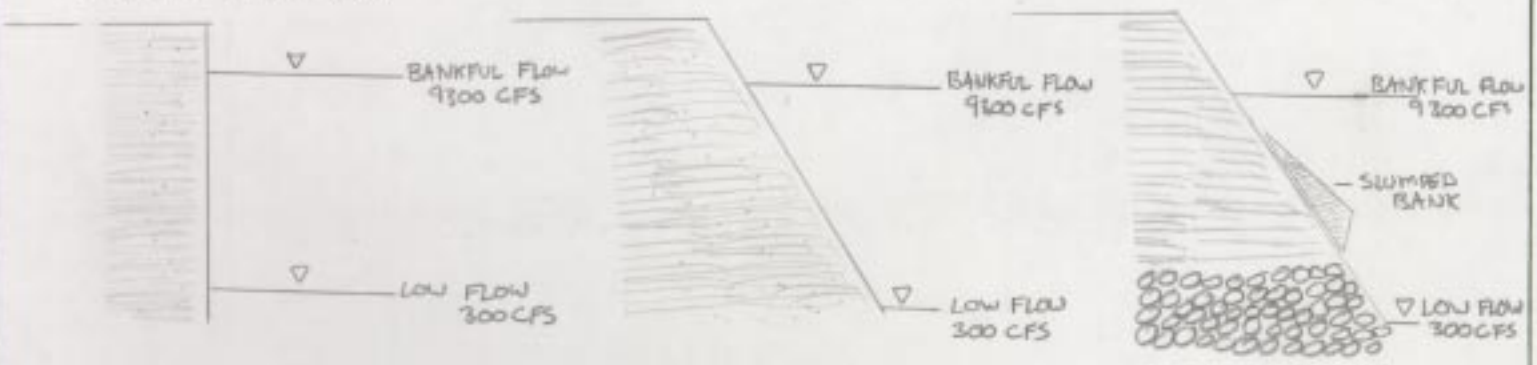


PHOTO EXAMPLE

JD-05.0 TERRACE

THE FORMATION OF THIS SITE IS THE RESULT OF LATERAL STREAM MIGRATION THE SITE IS HIGHLY VARIABLE BASE ON SLOPE, SUBSTRATE, AND SPATIAL LOCATION WITH RESPECT TO CHANNEL MIGRATION

CROSS SECTION



AERIAL EXAMPLE

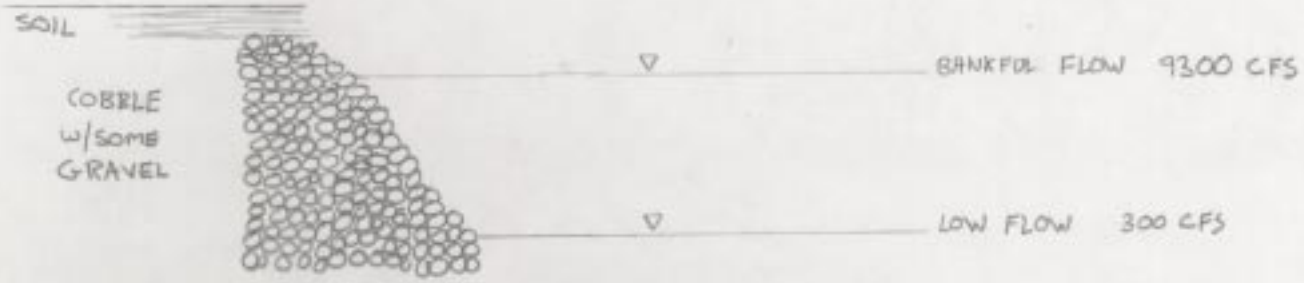
MAP EXAMPLE

PHOTO EXAMPLE

JD-05.1 NON-RIPARIAN TERRACE

THIS SISTE CONSISTS OF A SHALLOW SOIL TERRACE UNDERLAIN BY COARSE FLUVIAL SUBSTRATE, TYPICALLY GRAVEL OR COBBLE

CROSS SECTION



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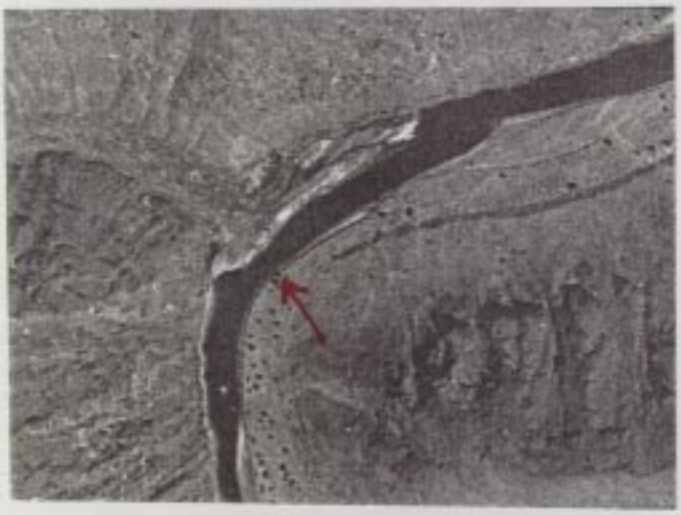


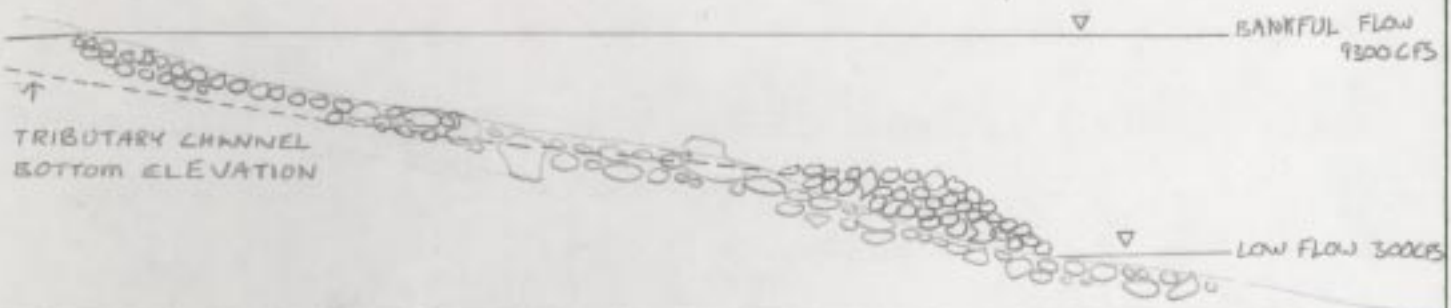
MAP EXAMPLE

PHOTO EXAMPLE

ID-06.0 ALLUVIAL FAN

THIS SITE FORMS A CONFLUENCE WITH TRIBUTARIES AND CANYON FEATURES. IT IS HIGHY VARIABLE AND GROUNDWATER RELATIONS ARE A KEY COMPONENT.

CROSS SECTION



AERIAL EXAMPLE

MAP EXAMPLE

PHOTO EXAMPLE

JD - 07.0 HILLSLOPE

THIS SITE CONSISTS OF SHALLOW STONY COLLUVIUM. FINE SOIL PORTION IS LOAMY IN TEXTURE. FLUVIAL FORCES HAVE LITTLE TO DO WITH THIS SITE. THIS SITE IS VERY STABLE.

CROSS SECTION

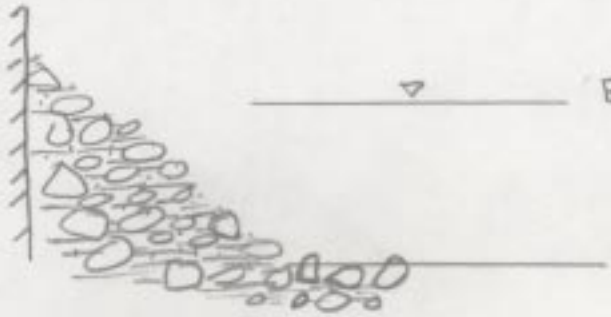
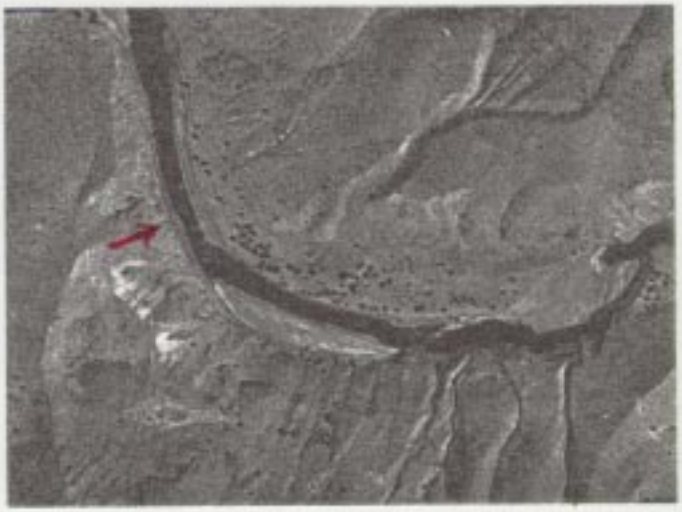


PHOTO EXAMPLE

AERIAL EXAMPLE



MAP EXAMPLE

Appendix N The Wilderness Review Process

The BLM is required by law to conduct a wilderness review of it's lands and recommend to Congress which lands are or are not suited for wilderness designation. The review process consists of the following three steps:

1. Wilderness Inventory Public lands are inventoried to determine whether or not they possess the wilderness characteristics described in federal law. Lands found to have these characteristics are designated Wilderness Study Areas (WSAs). They are managed to preserve those wilderness characteristics until the next step occurs.

2. Wilderness Study WSAs are studied to determine if they are best suited for wilderness designation or for some other non-wilderness use. This results in BLM recommending to Congress that they designate the WSA or drop it from further consideration.

3. Wilderness Reporting The BLM presents the results of the wilderness study to the President who presents the final recommendation to Congress. The designation of federal land as wilderness can only be done by Congress.

Additions to BLM Wilderness Study Area Lands Within the John Day Basin:

Sutton Mountain and Pat's Cabin WSAs - Details concerning the Wilderness inventory for these WSAs can be found in the Final Sutton Mountain Coordinated Resource Management Plan(CRMP), dated March 1995, and the Decision Record for the Sutton Mountain CRMP, dated March 1996.

North Pole Ridge WSA - Details concerning the Wilderness inventory and study completed for the original North Pole Ridge WSA are included in the BLM Wilderness Study Report, Volume 1, pgs. 631-640, dated October 1991.

Details concerning additions to the North Pole Ridge WSA follow:

Unit Number: North Pole Ridge 1, addition to North Pole Ridge WSA
Unit Name: OR-5-8

Description

Size: This unit contains 520 acres adjacent to the North Pole Ridge WSA.

Location: Along the John Day Wild and Scenic River about 15 miles northwest of Fossil, Oregon and 15 miles southwest of Condon, Oregon.

Boundaries: The unit is bounded to the south and west by the existing North Pole Ridge WSA and to the north by a utility corridor in Pine Hollow which contains a buried natural gas pipeline. To the southeast the unit is bounded by a small parcel of private land and a dirt road that traverses the east side of the river, then ascends the southwest side of Smith Canyon to the plateau above. To the northeast the unit is bounded by the John Day River.

Physical Characteristics: Within the unit, the John Day River has cut a 1,500 foot-deep canyon through the Columbia River Basalt Formation leaving escarpments along the canyon that are interspersed with volcanic talus and steep bunchgrass covered slopes. The unit includes portions of the John Day River Canyon, and two small tributary canyons, Zig Zag and an unnamed canyon. Elevations range from approximately 1,000 feet above sea level (ASL) at river level, to 2,000 feet ASL on the knobs and rocky ridges between side canyons.

The topography of the lands bordering the John Day River range from low river terraces of silt, sand and cobbles, to rounded grassy hills. At RM 86-87, near the center of the unit, a large bend in the river has created a river terrace about 75 acres in size. Approximately 15 acres of the river terrace are outside the unit boundary and are privately owned.

Away from the river, steep canyon walls of volcanic rock and talus rise towards the canyon rim, located from one to four miles away. The vegetation includes flats of juniper, sagebrush and snakeweed, to slopes of bunchgrass. Dalmation toadflax, a noxious weed, has invaded a portion of the large river terrace in the southern portion of section 9. Noxious weeds have invaded other portions of the unit to varying degrees, particularly river benches that are regularly washed with flood waters containing weed seeds.

Wilderness Criteria

Size: The unit satisfies the size criteria as it is contiguous with the North Pole Ridge WSA.

Naturalness: The unit appears to have been primarily effected by the forces of nature. The few unnatural features that exist, include a .4 mile way that parallels the east bank of the John Day River from Thirtymile-Smith Canyon road to the Northpole Ridge WSA boundary with a .4 mile fence paralleling the way on the east side. There is also an abandoned agricultural field of approximately 5 acres on a flat between the John Day River and Thirtymile-Smith Canyon Road. The field is in the process of reverting to natural vegetation. Overall the imprint of peoples work within the unit is substantially unnoticeable.

Solitude: The opportunity for solitude is outstanding throughout much of the unit. The basalt slopes of the 1,500 foot deep John Day River Canyon engulf the visitor and in many places give one the feeling of being completely alone. Near the center of the unit, the incised river canyon makes a major gooseneck turn, greatly reducing visibility around this bend, either upstream or downstream of the visitor's location. In the northern portion of the unit the opportunity for solitude is lessened by low rolling hills which increase visibility in the area between the canyon wall and the river. Despite a lesser degree of solitude in the northern portion, the unit as a whole contains many secluded spots, either along the river, up side canyons, or over their connecting ridges.

Recreation: The unit contains many outstanding opportunities for unconfined recreation including float boating, fishing, camping, hiking, hunting, wildlife viewing, bird watching, photography and viewing geological, and archeological features.

Supplemental values: Supplemental values found in this unit include 2.5 miles of the John Day River which provides critical habitat for steelhead, trout and chinook salmon, outstanding scenic quality, a natural bluebunch wheatgrass plant community, three Federal candidate plant species, protected wildlife including bald eagles and California bighorn sheep, the Columbia River Basalt formation and archeological sites.

Decision: The results of a wilderness inventory analysis concluded that this unit has wilderness character, worthy of further wilderness review, and on February 13, 1998, it was approved by the Prineville District BLM for addition to the North Pole Ridge WSA.

Rationale: This unit appears to be affected primarily by the forces of nature, and offers outstanding opportunities for solitude and primitive and unconfined forms of recreation. The unnatural features present are not dominant in the landscape.

Unit Number: North Pole Ridge 2, addition to North Pole Ridge WSA
Unit Name: OR-5-8

Description

Size: This unit contains 760 acres adjacent to the North Pole Ridge WSA.

Location: About one mile east of the John Day Wild and Scenic River, about 15 miles northwest of Fossil, Oregon and 15 miles southwest of Condon, Oregon.

Boundaries: The unit is bounded to the south and east by private land and to the west by the existing North Pole Ridge WSA. To the north, the unit is bounded by the thirtymile-Smith Canyon Road.

Physical Characteristics: the topography of the lands consists of several volcanic canyons that are deeply

incised in the Columbia River Basalt Formation. Elevations range from approximately 1,400 feet ASL at the bottom of Pete Enyart Canyon, to 2,600 feet ASL on the knobs and ridges between side canyons.

The vegetation is sparse in these rugged, rocky canyons, consisting primarily of sagebrush and bunchgrass. Springs and seeps are visible in the canyon walls, offering small riparian zones and patches of lush greenery. The bottom of the side canyons is rocky and sparsely vegetated due to the lack of regular runoff and occasional flash flood events.

Wilderness Criteria

Size: The unit satisfies the size criteria as it is contiguous with the North Pole Ridge WSA.

Naturalness: All portions of the unit appear to be in a natural condition and primarily affected by the forces of nature, protected from much of man's influence, primarily due to it's remote location. The extremely rugged topography of the lands within this unit have made human development difficult and undesirable. There are no known significant human impacts inside the boundaries of the unit.

Solitude: Outstanding opportunities for solitude exist in the entire unit, due in part to the topography of the area. The isolated canyons in this unit are so deeply incised that if two parties of hikers were exploring adjacent side canyons, they would not be aware of the other parties' presence. By hiking from the John Day River up one of these side canyons, one could find total solitude away from the sights, sounds and evidence of other people in the unit.

Recreation: The unit contains many outstanding opportunities for hiking, backpacking, hunting, wildlife viewing, bird watching, sightseeing, photography and viewing geological, and archeological features.

Supplemental values: Supplemental values found in this unit include the outstanding scenic qualities of the incised canyons bordering the John Day River, seeps and springs that provide a lush vegetation in contrast with the otherwise dry landscape, a natural bluebunch wheatgrass plant community, three Federal candidate plant species, protected wildlife including bald eagles and California bighorn sheep, the Columbia River Basalt formation and prehistoric sites.

Decision: The results of a wilderness inventory analysis concluded that this unit has wilderness character, worthy of further wilderness review, and on February 13, 1998, it was approved by the Prineville District BLM for addition to the North Pole Ridge WSA.

Rationale: This unit appears to be affected primarily by the forces of nature, and offers outstanding opportunities for solitude, and primitive and unconfined forms of recreation without the presence of unnatural features introduced my modern man.

Appendix O Visual Resource Management Classifications

The following are Visual Resource Management Classifications used by BLM.

Class I - The objective of this class is to preserve the existing character of the landscape. Natural ecological changes and very limited management activities are allowed. Any change created within the characteristic landscape must not attract attention.

Class II - The objective of this class is to retain the existing character of the landscape. Changes in any of the basic elements caused by a management activity should not be evident in the characteristic landscape. The level of change should be low and must repeat the basic elements of form, line, color, and texture found in the predominant natural features existing within the landscape. Changes are seen, but do not attract the attention of the casual observer.

Class III - The objective of this class is to partially retain the existing character of the landscape. Changes to the basic elements caused by a management activity are evident, but should remain subordinate to the existing landscape and should not dominate the view of the casual observer. Changes should be moderate and repeat the basic elements found in the predominant natural features of the landscape.

Class IV - The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. Changes may attract attention. Activities may be dominant features of the landscape but every attempt should be made to minimize the impact of activities through careful location, minimal disturbance, and repeating the basic elements of the natural features of the landscape.

Class V - The objective of this class is to provide for areas where activities have disturbed the natural landscape to a point where rehabilitation is needed to bring it up to one of the four other classifications. The level of rehabilitation will be determined by the minimal standards of the desired management class for the area.

Taken from BLM Manual 8400, Visual Resource Management, dated April 5, 1984.

Appendix P - Grazing Allotments Proposed to Have Livestock Class Restrictions

The following is a list of 96 grazing allotments proposed to have livestock class restrictions (no sheep/goat permits) to protect bighorn sheep. The 20 allotments with an asterisk (*) already have this livestock class restriction.

Segment 1 Allotment Number	Segment 2 Allotment Number	Segment 3 Allotment Number	Segments 5 & 10 Allotment Number
2500	2509*	2507	4020
2513	2514	2508	4038
2520	2518*	2512	4039
2540	2521*	2515	4052
2547	2522*	2516	4056
2555	2524	2531	4059
2560	2538*	2532	4073
2562	2541*	2533	4077
2594	2543	2535	4095
2595	2549	2536	4103
2597*	2553*	2537	4115
2598	2566	2544	4119
2604	2572*	2545	4124
2617	2574	2556	4164
2620	2581*	2561	
2637	2584*	2564	
2638	2587	2569	
2648	2591*	2570	
	2593	2576	
	2597*	2577	
	2608*	2587	
	2611*	2588	
	2614	2590	
	2616	2592	
	2619*	2609	
	2623	2624	
	2629*	2630	
	2631*	2633	
	2636*	2641	
	2651*	2649	
		2656	
		2657	
		2659	
		2664	

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
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