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

Vale District Office
100 Oregon Street
Vale, Oregon 97918

September 1993

Main, West Little and North Fork Owyhee National Wild and Scenic Rivers Management Plan and Environmental Assessment

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/PL-93/38+1792

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Vale District Office
100 Oregon Street
Vale, Oregon 97918

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

SEP 10 1993

Dear River User:

Enclosed for your review is the Final Management Plan and Environmental Assessment for the Main, West Little, and North Fork Owyhee Rivers.

This plan and the environmental assessment included herein are the result of a long and careful process of public involvement, issue identification, objective setting, action planning, and impact analysis. The final plan differs significantly from the draft both in terms of format and detail. We have attempted to articulate more clearly the relationship of issues, objectives and management actions, and have organized the document in a way that we hope will be easier for individuals to extract and consider the information contained within.

Decision:

It is my decision that this management plan be adopted and implemented as proposed. This plan will provide for the protection and enhancement of the outstandingly remarkable values for which these rivers were designated Wild and Scenic.

Appeals Process:

Within 30 days of receipt of this decision, you have the right to protest to the Vale District Manager and there after appeal to the Board of Land Appeals, Office of the Secretary, U.S. Department of the Interior, in accordance with the regulations of 43 Code of Federal Regulations (CFR) 4.400. Any protest to the Vale District Manager must be filed in writing in the Vale District BLM Office, 100 Oregon Street, Vale Oregon, 97938. If no protest or appeals are filed this decision will become effective and be implemented in 30 days.

Sincerely yours,

Jerry L. Taylor

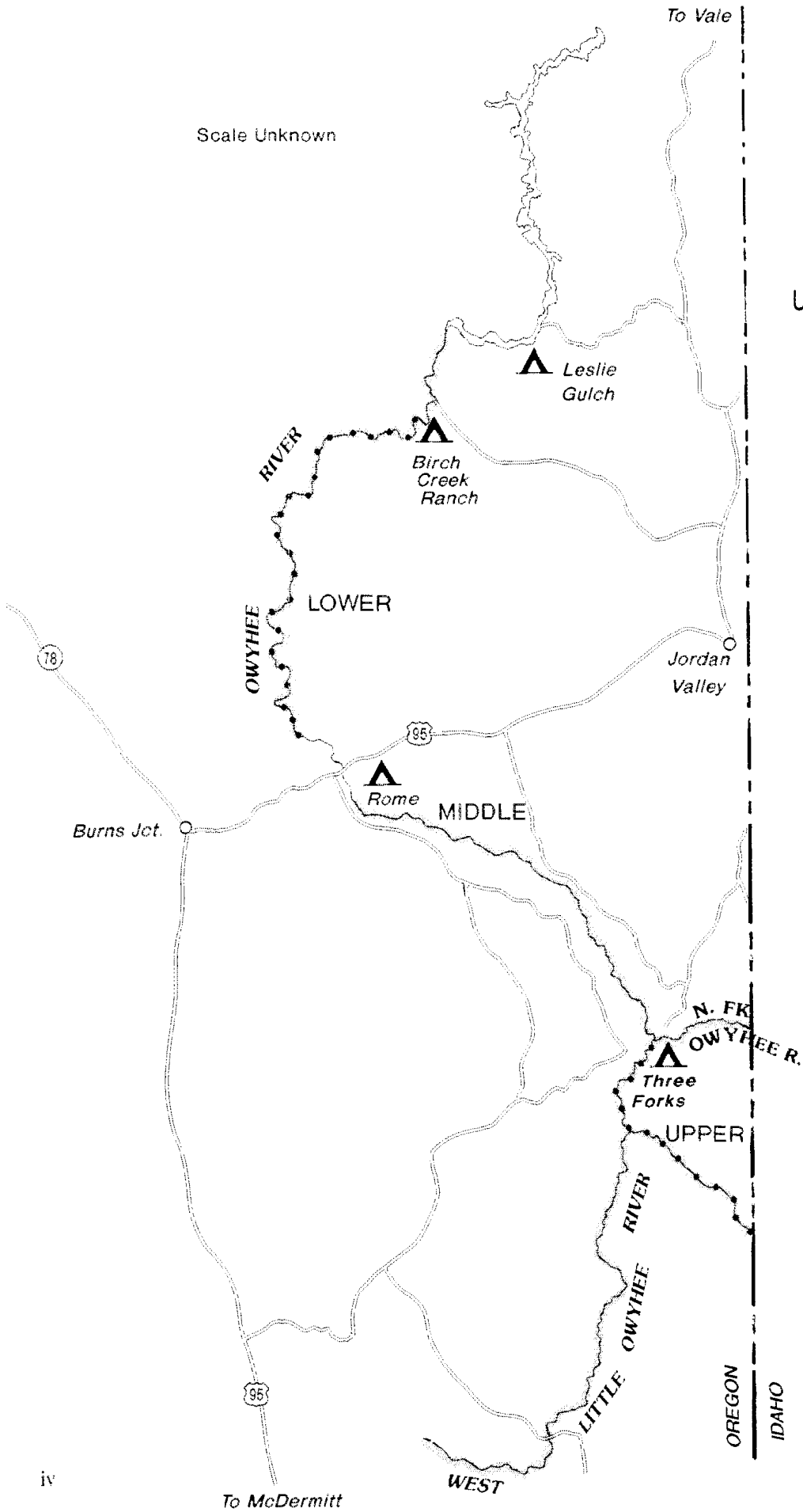
Jerry L. Taylor
Jordan Resource Area Manager

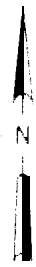
United States Department of the Interior
Bureau of Land Management
Vale District Office
100 Oregon Street
Vale, Oregon 97918

Main, West Little and North Fork Owyhee

National Wild and Scenic Rivers Management Plan and Environmental Assessment

September 1993



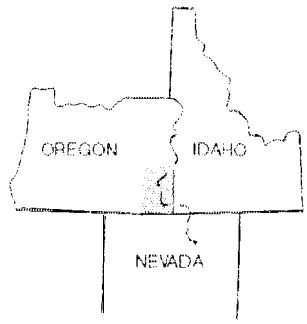


U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management

VALE DISTRICT

National Wild and Scenic Owyhee River System

1992



LEGEND

Wild River

Scenic Waterway

Recreation Site

Finding of No Significant Impacts
(OR-030-92-11)

I have reviewed Environmental Assessment OR-030-92-11 and find that the environmental impacts of the preferred alternative have been properly and completely addressed. On the basis of this environmental assessment, I have determined that implementation of the preferred alternative will not significantly impact the human environment and that the preparation of an environmental impact statement is not required.

Jerry L. Taylor
Jordan Resource Area Manager

9/9/95
Date

Table of Contents

CHAPTER ONE - INTRODUCTION 1
- Overview 2
- Legislative Background 3
- Outstandingly Remarkable Values/Special Attributes 4
- Management Planning Process 9
- Conformance with Land Use Plans 10
- Summary of Public Involvement 10
- Management Guidelines and Standards 11
- Management Guidelines Common to Wild, Scenic and Recreational Rivers 11
- Management Constraints 13
- Issues 15

CHAPTER TWO - MANAGEMENT DIRECTION 23
- Desired Future Conditions 24
- Management Goals 25
- Management Objectives, Actions and Rationale 26

CHAPTER THREE - MONITORING 43
- Monitoring 44
- Monitoring Table 45

CHAPTER FOUR - IMPLEMENTATION 53
- Overview 54
- Implementation Schedule and Cost Summary Table 54

CHAPTER FIVE - ENVIRONMENTAL ASSESSMENT 55
- Introduction 56
- Purpose and Need 56
- Management Alternatives 56
- Affected Environment 72
- Environmental Consequences 95
- Cumulative Impacts 99
- Mitigation 99
- Irreversible And Irretrievable Commitment of Resources 99

APPENDICES 125
- Planning Participants 127
- Law, Policy, References 129
- Glossary 131
- Related Federal, State, and Local Management Responsibilities 137
- Oregon State Scenic Waterway Program 143
- Memorandum of Understanding between BLM, OSPD and USFS 149
- Land Acquisition Parcels 153
- Recreation Opportunity Spectrum, Limits of Acceptable Change & Visual Resource Management 155
- Legal Descriptions of Administrative Boundaries 159
- Maps 195

Summary

This document was created by the Vale District Office of the Bureau of Land Management to establish a comprehensive set of actions to direct and guide future management of the Main, West Little and North Fork Owyhee Rivers. The intent of the Wild and Scenic Rivers Act, and the primary goal of this plan, is to maintain the free-flowing character of this river system and protect and enhance its outstandingly remarkable values (ORVs). The level of planning of this document provides the framework and authority for site specific or project planning within the river system.

This final management plan and environmental assessment (EA) OR-030-92-11 have been revised from the draft management plan and EA. Changes to the format of the document from the draft are significant. In order to assist the reader in finding information more easily, the organization of this final document is described below. Changes brought about by public and interdisciplinary input on the draft focus primarily on strengthening BLM's management role in protecting and enhancing the rivers' outstandingly remarkable values. These changes include clarifying the extended mineral withdrawal on the Main Owyhee, adding grazing utilization levels and other restrictions on grazing within the river corridors, increasing restrictions on recreation use such as requiring boaters to have, in their possession, a firepan and containerized toilet system before launching, incorporating The-Hole-In-The-Ground acquisition (EA OR-030-92-44), and increasing the inventory and monitoring programs on all resources especially the ORVs.

Organization of This Document

This document is presented in six chapters:

Chapter 1: provides background on the Owyhee River System, Wild and Scenic Rivers Act, State Scenic Waterway Program, a description of the outstandingly remarkable values (ORVs), the management planning process, summary of public involvement, management guidelines and standards for all wild river areas, management constraints for the Owyhee River System, and a description of the issues.

Chapter 2: describes the desired future condition of the ORVs and related resources, management goals, and management objectives and actions to be implemented and the rationale for those actions.

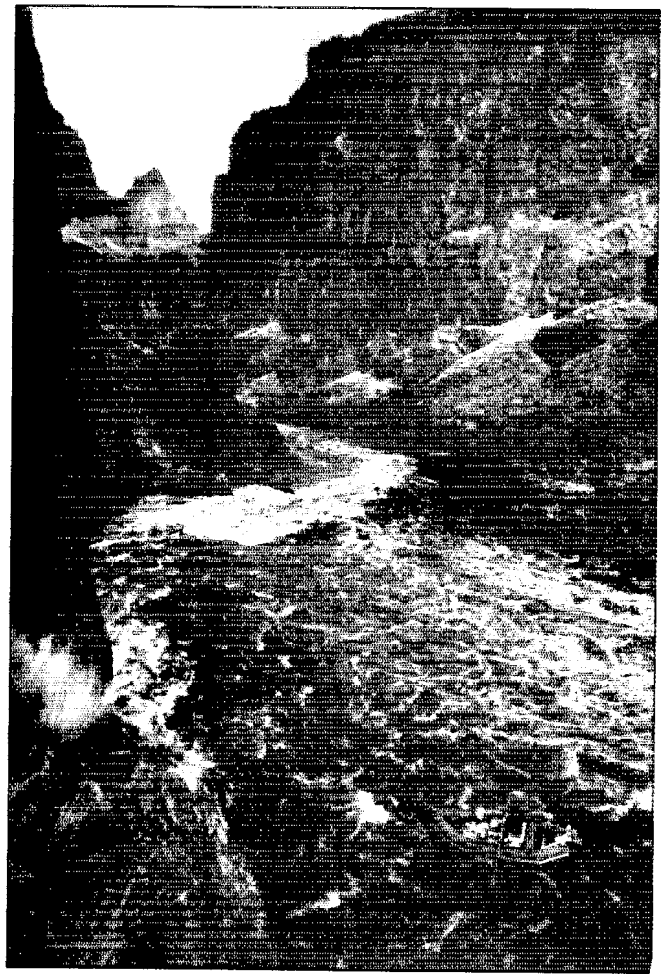
Chapter 3: provides a monitoring strategy including the Limits of Acceptable Change (LAC) for resources and resource uses within the river corridors.

Chapter 4: provides basic time schedule and funding needs for implementation of this river plan.

Chapter 5: contains the environmental assessment for the river plan including the purpose and need for the plan, management alternatives, affected environment, environmental consequences of the alternatives, and cumulative impacts and mitigation measures of the river plan.

Appendices: Planning Participants/Consultation Coordination; Laws, Regulations and other References; Glossary; Related Federal, State, and Local Management Responsibilities; Oregon State Scenic Waterway Program; MOU between Oregon BLM, State Parks, Forest Service; Acquisition Parcels; Recreation Opportunity Spectrum, Limits of Acceptable Change Process, and Visual Resource Management; Legal Descriptions of River Corridor Administrative Boundaries; Maps.

I. Introduction



Overview

The Owyhee River Basin comprises portions of northern Nevada, southwestern Idaho, and southeastern Oregon. The Owyhee Basin drains approximately 11,337 square miles from its headwaters in Nevada to its confluence with the Snake River south of Ontario, Oregon. The Main stem of the Owyhee River within Oregon is enjoined by its major tributaries, the West Little Owyhee River, Antelope Creek, the North Fork and Middle Fork Owyhee Rivers, and Soldier, Jordan and Crooked Creeks, as it flows northward to the Snake River.

The Owyhee Canyon, its tributaries, and adjacent upland areas have been inhabited by man for about 12,000 years. Given the extremes of the High Desert climate and the limited resources, the Native American hunter-gatherers probably lived in small groups and wintered in sheltered areas in the canyons utilizing the rivers' diverse resources. Recorded history of this area began in 1812 with the first exploration by white men. The name Owyhee evolved out of a scouting expedition in 1818. Two Hawaiian Islanders accompanying the party disappeared in the Owyhee River vicinity and by the 1830's the river become known as the "Owyhee" (colloquial usage of the word "Hawaii").

In 1968, Congress enacted the National Wild and Scenic Rivers Act, establishing a system for preserving outstanding free-flowing rivers. This system is known as the National Wild and Scenic Rivers System (NWSRS). Public Law 98-494 added 120 miles of the Main Owyhee River to the National Wild and Scenic Rivers System (NWSRS) in 1984. A management plan was completed in 1986 by the Vale District Office, BLM, to guide management of the Main Owyhee River. As a result of the Oregon Omnibus Wild and Scenic Rivers Act of 1988, 57 miles of the West Little Owyhee River and 9 miles of the North Fork Owyhee River were added to the NWSRS. All three designated rivers were classified by Congress as "Wild". In addition, in 1970, Oregon citizens approved the Oregon Scenic Waterways Act establishing 77 miles of the Main Owyhee River as a State Scenic Waterway.

The Secretary of the Interior, through the Bureau of Land Management, was directed by the Oregon Omnibus Wild and Scenic Rivers Act to develop management plans for the West Little and North Fork Owyhee Rivers. At the same time the BLM, Vale District determined it was necessary to amend the 1986 Owyhee Wild River management plan (developed for management of the Main Stem) in order to incorporate the acquisition of the Birch Creek and Morrison Ranches into the Owyhee Wild River management strategy, to address issues that had developed since the original plan, and to provide a coordinated management approach for the Owyhee Wild River System. Since these three rivers (Main, West Little and North Fork Owyhee) are all federally designated wild rivers within the National Wild and Scenic Rivers System and managed by the Jordan Resource Area of the Vale District, BLM initiated development of one management plan to direct and guide management of these important rivers.

Although most of the land along the Owyhee Wild River System is managed by the BLM, several other federal agencies, state and local governments, and private parties have interests in the resources of these rivers and adjoining lands. Coordination and cooperation with other agencies, and public support are critical to effective management of river areas.

The Owyhee Wild River System Management Plan will provide direction and guidance for the protection and enhancement of the outstandingly remarkable values within the river corridors and provide for public uses consistent with the National Wild and Scenic Rivers Act.

Legislative Background

Wild and Scenic Rivers Act

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 primary purpose of the Act is to balance river development with river protection.

> *The Congress declares that the established national policy of dam and other construction...needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.*

The Act specifically protects rivers from future hydropower development and impoundments. The Act also provides for the protection of river values for each river in the system through the development of a river management plan.

> *It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free-flowing condition, and...shall be protected for the benefit and enjoyment of present and future generations.*

The Act established a classification system for Wild and Scenic Rivers and defined each of the three classes. The three classifications are Wild, Scenic, or Recreational. The classification that pertains to the Owyhee System is "wild river areas."

> *Wild river areas — Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.*

State Scenic Waterway Act

In 1970, Oregon citizens voted for an initiative establishing the Oregon Scenic Waterways Act. This is a state law for river conservation to be administered by the State Parks and Recreation Department.

> *The people of Oregon find that many of the free-flowing rivers of Oregon and Waldo Lake and lands adjacent to such lake and rivers possess outstanding scenic, fish, wildlife, geologic, botanical, historic, archaeologic, and outdoor recreation values of present and future benefit to the public. The people of Oregon also find that the policy of permitting construction of dams and other impoundment facilities...needs to be complimented by a policy that would preserve...rivers or segments thereof in a free-flowing condition and would protect and preserve the natural setting and water quality...and fulfill other conservation purposes.*

The major goals of the Oregon Scenic Waterways Program are to (1) protect the free-flowing character of designated rivers for fish, wildlife, and recreation; (2) protect and enhance scenic, aesthetic, natural, recreation, scientific, and fish and wildlife qualities along scenic waterways; (3) encourage other agencies to act consistently with the goals of scenic waterways management. The Division of State Lands, the State Marine Board and the Water Resources Department also have special responsibilities associated with this Act. (Refer to Appendix E. OAR 736-40-040(1)(a)(C) page 143 for theState of Oregon land management rule associated with the Owyhee scenic waterway.)

The state classification that pertains to the Owyhee Scenic Waterway is natural river areas which is defined below.

> *Natural river areas—Those river segments in the state scenic waterway system that are generally inaccessible except by trail or boat; with related adjacent lands and shorelines that are essentially primitive, representing vestiges of primitive America.*

Owyhee River System

In 1984 Congress designated 120 miles of the Main Owyhee River from the Oregon-Idaho border downstream to the Owyhee Reservoir, excluding the Rome Valley from China Gulch to Crooked Creek, as a Wild and Scenic River and included it in the National Wild and Scenic Rivers System (NWSRS). The West Little Owyhee from it headwaters to its confluence with the Owyhee and the North Fork Owyhee from the Oregon-Idaho border to its confluence with the Owyhee were added to the NWSRS in 1988. All three rivers are classified as Wild which provides for the highest level of protection. Maps and legal descriptions of the boundaries are provided in the Appendices.

In 1970, the state of Oregon designated 70 miles of the Owyhee River as a State Scenic Waterway from the Oregon/Idaho border to Three Forks and from Crooked Creek to the mouth of Birch Creek. Both segments are classified as natural river areas. Administrative rules have been adopted by Oregon State Parks Department to help guide the use and management of lands adjacent to the scenic waterway (see Appendix E).

Outstandingly Remarkable Values/Special Attributes

The term Outstandingly Remarkable Values (ORVs) comes directly from the Wild and Scenic Rivers Act of 1968. A river need only have one ORV to be considered for the National Wild and Scenic Rivers System (NWSRS). The Act mandates that managing agencies "protect and enhance" the ORVs of a river within the NWSRS.

The Main Owyhee River was studied for inclusion into the NWSRS by the National Park Service. An Environmental Impact Statement finalized in 1979 recommended designation of the river and described the important resource values within the Owyhee River corridor that needed protection under the Act. When Congress designated the West Little and North Fork Owyhee Rivers in 1988, the Congressional Record listed or described unique resource values for each river. Because the 1988 additions to the NWSRS (40 rivers within Oregon, many of which also became Oregon State Scenic Waterways through Ballot Measure 7) happened without formal study of the rivers, the main agencies responsible for management of these new Wild and Scenic Rivers found a need to pool their common resources to do coordinated river planning.

Following the 1988 Oregon Omnibus Wild and Scenic River Act, the BLM, Forest Service, and Oregon State Parks Department formed an Interagency Rivers Team. This team was charged with the responsibility of coordinating issues of statewide significance and of providing consistent direction and counsel to local BLM and Forest Service personnel regarding the river planning process. The team then formed a discussion group (Wild and Scenic Rivers Policy Group) to handle some of the responsibilities. The group consists of representatives of the three land managing agencies, the Congressional delegation, the Bureau of Indian Affairs, Columbia River Intertribal Fish Commission, and timber, water, livestock, recreation, and environmental organizations. The group focused on resource assessments/data needs and interim management. The group established criteria for assessing an outstandingly remarkable value and developed it into a resource assessment process. Internal BLM policy (Instruction Memorandum OR-90-342) directed BLM Districts in Oregon to use the Resource Assessment process and criteria for ORVs.

The Vale BLM then went through the Resource Assessment process on the West Little and North Fork Owyhee Rivers to assess the value of various river resources and to determine what resources needed protection. The Statewide Comprehensive Outdoor Recreation Plan (SCORP) regions and geographic regions were used in the resource assessment process in determining ORVs on a regional basis. The SCORP region for the Owyhee system includes Malheur, Harney and Lake Counties. The geographic region included southeast Oregon, southwest Idaho and north central Nevada. In order to meet the criteria, an ORV must be rare, unique or exemplary within the region.

For those Main Owyhee River segments designated as State Scenic Waterways, the river values found to be outstandingly remarkable values through the federal assessment process were also found to be Special Attributes by Oregon State Parks. The state process of reviewing facts about the different river values and determining Special Attributes is called the scenic waterway resource analysis, and it is comparable to the federal resource assessment.

The outstandingly remarkable values/special attributes are:

Main Owyhee	**West Little Owyhee**	**North Fork Owyhee**
recreation	**recreation**	**recreation**
scenic	**scenic**	**scenic**
geologic	**wildlife**	**wildlife**
cultural		
wildlife		

Unique cultural sites were mentioned in the congressional record for the West Little Owyhee River, but due to inadequate funding and access problems, an intensive cultural inventory has not been performed. The management plan will address the need to determine if the West Little holds unique cultural sites as an ORV and, if so, how to protect it. Geology was mentioned in the congressional record for the West Little and North Fork, but during the resource assessment process, BLM determined that geology on these rivers is only a significant resource within the region and that the Main Stem provides the best examples of the unique geology of this river system. Resources and resource uses are described in the Affected Environment of the Environmental Assessment.

Known ORVs for each river segment are described below.

Recreation

Owyhee — Outstanding recreational opportunities are available in the canyon, including rafting, drift boating, kayaking, hiking, photography, nature study, fishing, hunting, camping, and rockhounding. The Owyhee is recognized throughout the country as a prime early-season white water river and is becoming increasingly popular with both commercial and non-commercial river runners.

Exploring the canyon on foot provides opportunities for photography, nature study, and rockhounding. Use is restricted by limited access and steep and rough terrain. However, the canyon is becoming increasingly popular as word spreads of its scenic beauty and unspoiled character.

Sport fishery includes remnant populations of rainbow trout and excellent populations of smallmouth bass and catfish. Mule deer, California bighorn sheep, antelope, chukar, quail, and sage grouse afford great opportunities for hunting, study and photography.

The recreation opportunities of the Owyhee River Canyon are of outstandingly remarkable value.

West Little — This river segment offers a wide variety of recreational opportunities. Very high quality off-trail backpacking opportunities with a range of physical challenge have been identified. The West Little Owyhee River has been identified as the major attraction for day hikers visiting the Upper West Little Owyhee and Owyhee Canyon Wilderness Study Areas.

Unique to the area is the opportunity to travel by swimming and hiking. Late summer pools bounded by high basalt cliffs must be crossed by those who wish to travel the length of the canyon. These pools are be challenging and exciting obstacles due to the abrupt turns of the canyon which make length of the pools uncertain.

Excellent wildlife viewing and hunting is available in this area due to the richness of the area's fauna. Photographers find challenging subjects in the wildlife and landscape.

Due to the variety and quality of recreation available within this river canyon, especially the outstanding opportunity for primitive type recreation experiences, the West Little Owyhee River and its corridor provide outstandingly remarkable recreational resource values. This finding confirms the Congressional Record.

North Fork — The North Fork Owyhee offers very high quality backpacking opportunities. Excellent opportunities for early season (spring runoff) expert level kayaking on the 12 mile section between North Fork Crossing and Three Forks are also available.

Numerous other recreational opportunities, including hunting, camping, wildlife viewing and photography are available in the area.

Recreation opportunities (primarily expert level kayaking and hiking) available within the North Fork Owyhee River corridor are determined to be of outstandingly remarkable value. This finding confirms the Congressional Record.

Scenic

Owyhee — The canyons of the Owyhee River are dramatic, awe-inspiring landforms. The reddish-brown canyon walls, sharply contrasted by the colorfull, eroded chalky cliffs, reach up to 1,000 feet above the pristine sagebrush and grass covered and talus slopes that form the river's edge. In places the cliff drops hundreds of feet directly into the river. The canyon rims are often eroded into a multitude of towering spires, while in other areas the canyon walls reach to the sky as fractured, blocky monoliths tinted with brilliant green, yellow and orange microflora.

Numerous side canyons offer an element of mystery as they twist out of sight, and erosional features such as honeycombed cliffs and perched rock formations add intriguing textures and colors to the vertical landscape.

This drop and pool type river offers thrilling whitewater and slow-moving, serene pools providing the boater with an excellent opportunity to view an ever-changing scene of water and land forms.

The combination and contrasts of land, vegetation and water justifies the scenic value of the Owyhee to be deemed outstandingly remarkable.

West Little — The designated river corridor is characterized by the stark contrast between the inner canyon and the typically flat sagebrush plateau through which it runs. The river itself offers many cool, clear, secluded pools that are confined by sheer rock walls whose colorful, abstract beauty is the product of eons of erosion and weathering. Between those pools are reaches that flow as riffles or rapids during periods of high water, but which become sandy or gravelly dry reaches in the drier summer months. The vegetation within the corridor is virtually pristine in all but the upper reaches due to the rugged canyon walls that limit human and live-

stock use. The solitude and lack of apparent human influence enhance the stark beauty of the canyon. Views from the canyon rim command a feeling of awe and wonder, as the river and its past are revealed in the rock strata that have been laid there by ancient volcanic activity.

The West Little Owyhee offers a unique landscape containing visual qualities that result in outstandingly remarkable scenic values. This finding confirms the Congressional Record relating to the scenic values of the West Little Owyhee River.

North Fork — The designated river corridor contains a subtle diversity of land forms and vegetation. Interesting erosional patterns and colorful rock strata mix with large stands of juniper. Canyon bottoms are overshadowed by steep, rugged canyon walls. Two main side canyons laced with juniper trees add to the complexity of the landscape. In the typically flat high sagebrush desert these canyons provide an exceptional visual setting. The remoteness and solitude found there contribute to this scenic setting.

The North Fork Owyhee River offers a unique landscape holding landforms, vegetation, and water that possess visual qualities resulting in outstandingly remarkable scenic values. This finding confirms the Congressional Record.

Geologic

Owyhee — Rocks exposed along and adjacent to the Owyhee River range in age from late Miocene to recent. From oldest to youngest, these groups consist of rhyolitic flows, basalt flows, sedimentary rocks, young lavas, and alluvial deposits. Benchlands were formed during a period of intensive volcanic activity. Lava flows filled the stream valleys, including the Snake River, damming them and impounding large lakes. Several thousand feet of sediments were deposited in the lakes which subsequently were drained by streams eroding through basalt dams.

The geologic features are influenced by faulting and warping. A portion of the river valley is structurally controlled by a fault which has down-dropped the east side of the canyon relative to the west side. The colors within the canyon vary from mainly buff or reddish-colored rhyolite and darker basalt to the area called Chalk Basin typified by alternate very dark and chalk-colored deposits.

The geologic resources of the Owyhee River Canyon are outstandingly remarkable. These unique geologic features add significantly to the scenic quality of the area.

Prehistoric, Cultural

Owyhee — The Owyhee and its margins would have been the major source of permanent water, fuel, animal and vegetable foods, and protected campsites in the harsh environment of arid southeast Oregon. Approximately 100 prehistoric cultural resource sites have been recorded on the lower segment of the Owyhee River between the Rome Launch Site and Birch Creek Ranch. Half of these sites are considered significant by the archeologist who recorded them. The lower Owyhee contains outstandingly remarkable sites with research and public education values. "The Hole-in-the-Ground" Petroglyph Site is probably the outstanding site of its kind in eastern Oregon, and can be investigated by archaeologists and enjoyed by the public.

Limited inventories have been conducted within the corridor upstream from Rome to the Idaho border, however, a significant site was found and professionally excavated along a tributary of the Owyhee. Archeological resources found within this rock shelter have been carbon dated to 9,500 before present. Based on this evidence and our knowledge of the area, we believe that outstandingly remarkable archeological properties are present along the upper reaches of the Owyhee River.

Significant archeological sites have been identified within the Owyhee River corridor and others may exist. Therefore, the prehistoric cultural resource is an outstandingly remarkable value of the Owyhee River.

Historic, Cultural

Owyhee — Historic sites that contributed to the Euro-American settlement and development of southeast Oregon and southwest Idaho are present within the Owyhee River area. Wagon and military roads dating back to the 1860's criss-cross the Owyhee and provide insight into the settlement and development of this area.

Birch Creek Ranch, an historic ranch managed by the BLM, has been recorded by an historian, and is considered eligible for the National Register of Historic Places. It is described as an historic rural landscape, and represents historic ethnic values of early Basque settlement of the area.

Abandoned ranches and homesteads, represented by the remains of cabins, old road grades, stone corrals, irrigation ditches, exotic trees and other plantings, stone fences, collapsed dams, cleared fields, and the rusted remains of farm equipment are visible along the river. They attest to early, often unsuccessful, efforts to settle, farm, and ranch the fertile river benches.

Although only one historic site along the Owyhee has been recorded and determined to be eligible for the National Register of Historic Places, other sites appear to meet one or more of the criteria for eligibility, and thus add to the outstandingly remarkable determination. The Owyhee River plays a major role in the cultural history of the area. The historic cultural resources of this river are outstandingly remarkable.

Wildlife

Owyhee — The Owyhee River Canyon and adjacent sagebrush desert lands on the rims provide diverse habitat for over 200 species of wildlife. Birds are especially abundant, both in species richness and number of individuals. The 120 miles of canyon walls provide excellent habitat for nesting raptors. The Owyhee and its associated canyons rival the Birds of Prey area, near Boise, Idaho, in raptor variety and abundance. Swainson's, Ferruginous, and red-tailed hawks, as well as kestrel, and northern harrier are common. Prairie falcon and sharp-shinned hawks have frequently been observed. Golden eagles are abundant year-long while a small number of bald eagles, attracted by abundant waterfowl, winter in the canyons.

Upland game birds include large populations of chukar partridge and California quail. Scattered groups of Hungarian partridge may be observed. Mourning dove make extensive use of the area during the breeding season. Sage grouse are especially common on adjacent benchlands in mixed sagebrush habitats.

Wintering waterfowl utilize the unfrozen pools between rapids and Canada geese are especially abundant during severe winters. Census by BLM and Oregon Department of Fish & Wildlife have often tallied over 3,000 geese plus nearly as many mallard, redhead, teal, scaup, merganser, and grebe. Several of these waterfowl species are attracted to the Owyhee and tributaries by the abundance of fish, especially non-game species such as shiners and dace.

Riparian vegetation within the canyon attracts a host of song birds. Many are uncommon to the surrounding expanses of arid desert, making the Owyhee Canyon truly an "oasis."

California bighorn sheep, reintroduced into several areas within the river canyon in the 1960's and 1980's, maintain viable populations. California bighorn sheep is a federal Category II candidate under the Endangered Species Act. During the early 1970's the California bighorn was listed as rare on Oregon's state list, but currently has no state designation.

Other species include mule deer and pronghorn antelope which use the associated benchlands adjacent to the canyon. Mountain lion (cougar) have become more common during recent years. Other mammals of these varied habitats include bobcat, coyote, badger, beaver, otter, muskrat, marmot, raccoon, porcupine, and jack and cotton-tail rabbit.

The quality of the habitat and the diversity and abundance of wildlife within the Owyhee canyon affords this resource to be deemed outstandingly remarkable.

West Little — Values noted for the Owyhee River Canyon are also present for the West Little Owyhee River and its spectacular canyon. The West Little Owyhee is noted for its abundance and variety of birds. Much of this pristine canyon is used as nesting habitat by a wide variety of raptors including several hawk species and golden eagles. The canyon holds habitat that would seem to be favorable for peregrine falcons, but only unconfirmed sightings have been reported from the area. Prairie falcon inhabit the area in significant numbers. Chukar partridge frequent the rimrocks and talus slopes. Numerous species of nongame birds take advantage of the excellent habitat diversity of this canyon. The plateau surrounding the canyon is home to a notably large concentration of sage grouse; the largest in Malheur County.

A variety of mammals inhabit the river area. Notable among these is a herd of California desert bighorn sheep. Toppin Creek Canyon in particular provides excellent habitat for bighorns. In 1989 two trophy rams were taken from this special hunt area. Pronghorn antelope, mule deer and various small game, fur-bearers, and rodents are common. White-tailed jackrabbits are common. The abundance of small mammals on the plateau contributes to the success of the extensive raptor population. Various bats inhabit the crevices of the canyon rocks.

The quality and importance of habitat and resulting wildlife species diversity, particularly for raptors and bighorn sheep, qualifies this resource to be considered an outstandingly remarkable value of the West Little Owyhee River. This outstandingly remarkable value was not recognized in the Congressional Record.

North Fork — A community of western juniper provides hiding and thermal cover for wildlife. Mule deer make use of the North Fork Canyon as a migrational corridor to wintering ranges farther down the main Owyhee Canyon. Other species include cougar, pronghorn antelope, and white tailed jackrabbit. The abundance of small mammals on the plateau contributes to the large and diverse raptor population of the canyon.

Numerous species of birds utilize the juniper trees throughout the year. Sage grouse, a candidate for federal listing as Threatened or Endangered, are quite common. Numerous species of nongame birds take advantage of the diverse habitat.

Due to the variety and quality of wildlife and wildlife habitat within this area, wildlife values on the North fork of the Owyhee are outstandingly remarkable. When considered as part of the complex of habitats that interact through the entire river system of the Owyhee (especially the migration routes), these values may be found to be greater or more significant. This finding is consistent with the Congressional Record.

Management Planning Process

In accordance with the National Environmental Policy Act (NEPA) and the Wild and Scenic Rivers Act, this document was prepared using an interdisciplinary team approach (see Appendix A for a list of team members). The planning process provided opportunities for the involvement of federal and state agencies, local governments and interested citizens. The planning process involved six steps.

A. Preliminary Boundaries: Preliminary administrative boundaries were identified for the rivers through a public notification and involvement process.

B. Resource Assessment: Congress did not identify and evaluate all outstandingly remarkable values to be considered in river management, therefore, the BLM conducted a Resource Assessment to determine the relative significance of certain river values. A draft Resource Assessment was prepared and sent out for review in May, 1991. The document was finalized in the fall of 1991. The assessment helped focus management priorities and provided information on which to base the management plan.

C. Project Scoping: Key management issues were identified with public involvement. Public involvement included public meetings, written public comments, a key planning group, federal and state agencies, local governments and interested citizens.

D. Develop Alternatives for River Management: The NEPA process mandates that a range of reasonable alternatives for river corridor management be developed. Three possible management alternatives for the Owyhee System were identified. Chapter 5 describes the alternatives in detail.

E. Prepare an Environmental Assessment (EA): The first four steps listed above were part of the EA preparation. Data gathered in these steps was then compiled into an environmental assessment document along with several other key items. These include a discussion of the affected environment, a thorough analysis of the impacts of each management alternative on the affected environment, and other information necessary so that agencies, landowners, recreationists and others may make informed comments regarding their preferences and concerns.

F. Prepare a Decision Notice and Final River Management Implementation Plan: Based on written public comments and management concerns, the BLM will select one of the alternatives - perhaps with some modification - to become the final management plan. The management plan will be issued with the Decision Notice. Management of the river system according to this plan will begin pending any administrative appeals received after the decision is published.

Conformance with Land Use Planning

The Southern and Northern Malheur Management Framework Plans support the development of this plan as directed by the National Wild and Scenic Rivers Act and the Oregon Scenic Waterways Act. This river plan is also in conformance with the Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP), and the Malheur County Land Use Plan. This plan supersedes the existing BLM Owyhee Wild River Plan (1986).

Summary of Public Involvement

Throughout the planning effort public involvement has been key to development of the management plan. BLM requested public input starting with preliminary boundary setting, then issue scoping, management action evaluation, and draft plan and environmental assessment review. Although public involvement did not spawn enough interest for an Ad-Hoc/Citizens Advisory group, a key group of affected/interested people provided input to BLM in this planning process. Public meetings and mass mail-outs were used to scope issues. Issues and alternatives were sent to the key group to review, evaluate and analyze. Their comments assisted BLM in developing a Preliminary Draft Plan and Environmental Assessment (EA) which they then had the opportunity to review prior to full public review of the draft (BLM-OR-AE-92-21-1792). Appendix B lists all the members of the key group.

Nineteen written public comments were received on the draft plan/EA. The majority of comments addressed livestock use (both for and against) and protection of water quality. Other comments included such things as the need for a desired future condition section, the need to more thoroughly address management of the vegetation resource, less emphasis on the recreation ORV over other ORVs, and use of old military wagon roads as hiking trails. All written comments were evaluated and, as appropriate, incorporated into the final plan/EA.

Management Guidelines/Standards

The Wild and Scenic Rivers Act established a general management principle to guide management of designated rivers. It is as follows:

> Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

This section of the Act (10(a)) has been interpreted by the Secretaries of Interior and Agriculture as stating a non-degradation and enhancement policy for all designated river areas, regardless of classification (wild, scenic or recreational).

In 1982, Final Revised Guidelines for Eligibility, Classification and Management of Wild and Scenic River Areas were published in the Federal Register (*FR* Vol. 47. No. 173, pp. 39454-39459). The guidelines and standards described below, which stem from the Wild and Scenic Rivers Act, are taken from BLM Manual 8351 which includes the Federal Register information. Since the three designated Owyhee Rivers are all classified as wild river areas the following BLM guidelines and standards are in effect.

Management Guidelines Common to Wild, Scenic and Recreational Rivers

Wilderness Study Areas

Management of river areas which overlap designated wilderness areas or wilderness study areas will meet whichever standard is highest. If an area is released from wilderness study area status and the associated Interim Management Policy, the applicable river classification guidelines and standards would then apply.

Fire Protection and Suppression

Management and suppression of fires within a designated river will be carried out in a manner compatible with contiguous Federal lands. On wildfires, suppression methods will be utilized that minimize long term impacts on the river and river area. Pre-suppression and prevention activities will be conducted in a manner which reflects management objectives for the specific river segment. Prescribed fire may be utilized to maintain or restore ecological condition or meet objectives of the river plan.

Insects, Diseases and Noxious Weeds

The control of forest and rangeland pests, diseases and noxious weed infestations will be carried out in a manner compatible with the intent of the Act and management objectives of contiguous Federal lands.

Cultural Resources

Historic and prehistoric resource sites will be identified, evaluated and protected in a manner compatible with the management objectives of the river and in accordance with applicable regulations and policies. Where appropriate, historic or prehistoric sites will be stabilized, enhanced and interpreted.

Fish and Wildlife Habitat Improvement

The construction and maintenance of minor structures for the protection, conservation, rehabilitation or enhancement of fish and wildlife habitat are acceptable provided they do not affect the free flowing characteristics of the river, are compatible with the classification, that the area remains natural in appearance and the practices or structures harmonize with the surrounding environment.

Management Guideline for Wild River Areas

Management of wild river areas should give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting.

Management Standards for Wild River Areas

Allowable management practices might include construction of minor structures for such purposes as improvement of fish and game habitat; grazing; protection from fire, insects, or disease; and rehabilitation or stabilization of damaged resources, provided the area will remain natural appearing and the practices or structures will harmonize with the environment. Developments such as trail bridges, occasional fencing, natural appearing water diversions, ditches, flow measurement or other water management devices, and similar facilities may be permitted if they are unobtrusive and do not have a significant direct and adverse effect on the natural character of the river area.

a. **Forestry Practices:** Cutting of trees will not be permitted except when needed in association with a primitive recreation experience (such as clearing for trails) and for visitor safety or to protect the environment (such as control of fire). Timber outside the boundary, but within the visual corridors should, where feasible, be managed and harvested in a manner to provide special emphasis to visual quality.

b. **Water Quality:** Water quality will be maintained or improved to meet Federal criteria or Federally approved state standards. (River management plan shall prescribe a process for monitoring water quality on a continuing basis.)

c. **Hydroelectric Power and Water Resource Development:** No development of hydroelectric power facilities would be permitted. No new flood control dams, levees, or other works are allowed in the channel or river corridor. All water supply dams and major diversions are prohibited. The natural appearance and essentially primitive character of the river area must be maintained. Federal agency groundwater development for range, wildlife, recreation or administrative facilities may be permitted if there are no adverse affects on outstandingly remarkable river related values.

d. **Mining:** New mining claims and mineral leases are prohibited within 1/4 mile of the river (as stated in section 9 of the Wild and Scenic Rivers Act). Valid existing claims would not be abrogated and, subject to existing regulations (e.g. 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the rivers included in the National System, existing mining activity would be allowed to continue. All mineral activity on federally administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation, pollution, and visual impairment. Reasonable mining claim and mineral lease access will be

permitted. Mining claims beyond 1/4 mile of the river, but within the wild river area boundary, and perfected after the effective date of the wild river designation can be patented only as to mineral estate and not to surface estate.

e. Road and Trail Construction: No new roads or other provisions for overland motorized travel would be permitted within a narrow incised river valley or, if the river valley is broad, within 1/4 mile of the river bank. A few inconspicuous roads leading to the boundary of the river area and unobtrusive trail bridges may be permitted.

f. Agricultural Practices and Livestock Grazing: Agricultural use is restricted to a limited amount of domestic livestock grazing and hay production to the extent currently being practiced. Row crops are prohibited.

g. Recreation **Facilities:** Major public use areas, such as campgrounds, interpretive center, or administrative headquarters are located outside wild river areas. Simple comfort and convenience facilities, such as toilets, tables, fireplaces, shelters, and refuse containers may be provided as necessary within the river area. These should harmonize with the surroundings. Unobtrusive hiking and horseback riding trail bridges could be allowed on tributaries, but would not normally cross the designated river.

h. **Public Use** and **Access:** Recreation use including, but not limited to, hiking, fishing, hunting, and boating is encouraged in wild river areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance wild river values.

i. Rights-of-Way New transmission lines, natural gas lines, water lines, etc., are discouraged unless specifically prohibited outright by other plans, orders or laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on wild river area related values and fully evaluated during the site selection process.

j. Motorized Travel: Motorized travel on land or water could be permitted, but it is generally not compatible with this classification. Normally, motorized use will be prohibited in a wild river area. Prescriptions for management of motorized use may allow for search and rescue and other emergency situations.

Management Constraints

In addition to the national guidelines/standards just mentioned, certain constraints exist which influenced development of this river plan. These constraints, which include existing law, policy, designations, land use plans, and implemented decisions, are summarized below.

Wild and Scenic River Act

All public lands within the authorized boundaries of the Owyhee National Wild River System designated by the Wild and Scenic Rivers Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States (The National Wild and Scenic Rivers Act, 1968, as amended).

Subject to valid existing rights, the minerals in Federal lands which are part of the Owyhee National Wild River System and constitute the bed or bank or are situated within one-quarter mile of the bank of the Owyhee, West Little Owyhee and North Fork Owyhee Rivers designated wild rivers under The Act or any subsequent Act are hereby withdrawn from all forms of appro-

priation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto. (The Wild and Scenic Rivers Act, 1968, as amended.)

State Scenic Waterways

Two sections of the Owyhee River are classified as State Scenic Waterways. The main Owyhee from the Oregon-Idaho border to Three Forks (25 miles) and from Crooked Creek to Birch Creek (42 miles). The Oregon State Scenic Waterways Program promotes cooperative protection and wise use of rivers in the system by all federal, state and local agencies; individual property owners, and recreational users. BLM and the State Parks Department will coordinate management of these sections. Refer to Appendices E and F for more information.

Navigability

The Federal court determination for navigability has not been made for the Main, West Little and North Fork Owyhee Rivers. The BLM considers rivers nonnavigable until proven otherwise while Oregon Division of State Lands considers there is sufficient evidence to support a claim of navigability on at least the Main and North Fork Owyhee Rivers. (Refer to the Affected Environment section in Chapter Five for more details on navigability.)

Wilderness Study Areas

Portions of the river corridors are within BLM Wilderness Study Areas (WSAs). Federal lands within WSAs are managed under the BLM's "Interim Management Policy and Guidelines for Lands Under Wilderness Review" (IMP). Basically, the IMP provides for protection of each WSA's wilderness values. Only Congress can determine what areas may be designated as wilderness. If part or all of a Wild and Scenic River is designated as Wilderness then it shall be subject to both the Wilderness Act and the Wild and Scenic Rivers Act, and in case of conflict, the more restrictive provisions shall apply.

Historic Birch Creek Ranch

The significance of the Birch Creek Ranch as a rural historic landscape (National Register site) requires BLM to protect and maintain this cultural resource. All applicable cultural resource protection laws will be enforced.

Since the Birch Creek Historic Ranch area is also an administrative and recreation site managed by BLM, hunting and shooting restrictions are required by federal regulations (43 CFR 8365.2-5). However, the boundary of the shooting restriction area will be brought out as a separate action.

Military Overflights

Military overflights will continue to occur in the airspace above the Owyhee Wild River System. Increases in number and types of military aircraft and use of chaff and flares will occur as documented in the Final Air Force in Idaho Environmental Impact Statement (1992) prepared by the Air Force. Opportunities for solitude will be reduced. BLM, Oregon and Idaho, reviewed and commented on the EIS (Draft and Final) describing the impacts that would occur to wild river and wilderness values.

Water Rights

Many individuals or entities in Nevada, Idaho and Oregon own and claim rights to the waters of the Mainstem Owyhee River and its tributaries. In the entire Owyhee River drainage basin, Oregon is the only state where water rights have been adjudicated. The adjudicated or claimed water rights to the Mainstem exceed average annual flows. The largest upstream water withdrawals occur in the Duck Valley Indian Reservation and include Wildhorse reservoir (for

irrigation purposes), and Sheep Creek and Mountain View Reservoirs (for recreational purposes). If all rights were simultaneously exercised, the effect would be to virtually dewater the river at certain times of the year, however, full utilization of water rights has yet to occur. Any remaining flow would result largely from irrigation returns. For example, it is estimated that 80 percent of the water utilized for irrigation on the Duck Valley Indian Reservation returns to the river.

Issues

Planning issues were generated through the scoping process which included public meetings, written public comments, a key group, a BLM interdisciplinary team, federal and state agencies, local governments, and interested citizens.

Issue 1: How will visual resources be managed?

Issue Description: Scenery is an outstandingly remarkable value (ORV) for all three rivers. Concerns have been expressed that livestock practices at certain locations are impairing the visual resources and certain types of recreational use and use levels may also impacting the visual resources. Future potential mineral development and other potential surface disturbances have also been identified as concerns.

Issue 2: How will BLM and other affected agencies manage mining activities within the designated river corridors (administrative boundaries)?

Issue Description: There are currently no mining claims within the boundaries of any of the three designated rivers. The mineral withdrawal enacted by the Wild and Scenic Rivers Act protects one quarter mile on each side of the river along all three rivers. The area between the administrative boundary and the 1/4 mile mineral withdrawal is open to mineral entry and mineral development. How can ORVs be protected and enhanced and mining allowed within this area?

Issue 3: How will acquired properties such as Birch Creek, Morrison and The-Hole-In-The-Ground be managed?

Issue Description: BLM has acquired several developed properties within the river corridor that have buildings, cultivated fields and other man-made improvements such as fences and ditches. The Birch Creek and Morrison properties qualify for the National Register of Historic Places, but no evaluation has been conducted for The-Hole-In-The-Ground property. Several surface water rights for irrigation purposes (including agricultural uses) were transferred to the BLM as a consequence of acquiring these properties. The Birch Creek and Morrison fields contribute to the historic landscape. Most of the fields are in poor condition and are subject to erosion and weed infestation. An interim plan for the Birch/Morrison properties established a no shooting zone for safety reasons and opened the properties for public use.

Issue 4: How will BLM manage cultural resources on public lands within the river corridors?

Issue Description: Adverse impacts to cultural sites are occurring within the river canyons. Minimal inventory work has occurred. A formal inventory of the lower section of the Main Owyhee was completed in 1976. That inventory documented that for the lower Owyhee erosion, grazing, and human activities were degrading cultural resources. Sites have been heavily potted and casual surface collection of artifacts is an ongoing problem degrading the cultural resources. The report noted that areas where vehicles can reach were being impacted more than areas reachable only by boat, but almost all sites experienced some degradation. In 1993, a reinventory of the lower section and partial inventories of the middle and upper sections were conducted. This work, which focused on cultural sites that are also used as modern day campsites, showed an increase in impacts to cultural values from human activities such as vandalism, potting or

digging, and surface collection. Inventories of the North Fork and West Little Owyhee have not been performed. Minimal education and law enforcement efforts to prevent impacts or to interpret this interesting and unique resource to the visiting public have occurred.

Issue 5: How will BLM manage the fish and wildlife habitat within the river corridors?

Issue Description: At this time, no known impacts are occurring to wildlife within the canyons. Concern has been expressed on potential impacts to bighorn sheep and Canada geese (especially during nesting) from human induced stress. Thorough fish and wildlife inventories have not been completed on the North Fork or West Little Owyhee. Redband trout, a candidate species for listing under the Federal Endangered Species Act, may exist in the smaller stream segments located within the administrative boundaries of the designated rivers.

Issue 6: How will BLM manage livestock grazing within these river corridors?

Issue Description: At certain locations along each river segment, grazing is suspected of causing impacts to the outstandingly remarkable values identified in each rivers designation. Areas of concern include Five Bar, Three Forks, Deary Pasture, Sand Hollow, Fletcher trail, Granite Creek, Sand Spring to Bull Creek, The-Hole-In-The-Ground, Greely Bar, Island Field, Squaw Creek (upper North Fork Owyhee), Anderson Crossing, and the upper reaches of the West Little Owyhee River. Of the total 186 designated Wild and Scenic River miles, approximately 67 miles (thirtysix percent) has received some degree of livestock use. This grazing use ranges from heavy use near water gaps to very slight use where cattle, in small numbers or infrequently, wander from access areas either up or down river. Of the total, 18 miles (ten percent of the designated river system) has identified livestock concerns. These concerns include:

- conflicts with recreationists where livestock congregate, graze, and deficate on and around campsites;
- visual impacts of livestock trailing and grazing affecting scenic and recreation values;
- ecological condition (status) of upland and riparian areas currently in early to mid seral ecological status that have been or are heavily impacted by livestock grazing, trampling or defecation.

The House Committee on Insular Affairs submitted in its report that "livestock grazing and associated ranching activities .... may be allowed to continue within the boundary of the wild and scenic river corridor where they are not detrimental to soil stability, water quality, and other values, and are consistent with the Wild and Scenic Rivers Act." Local livestock operators have expressed the need to continue grazing, gathering and trailing livestock within specific areas of the river corridors.

Issue 7: How will BLM manage gathering and trailing of livestock within the river corridors?

Issue Description: Several areas along the river corridors have been livestock gathering and trailing routes for many years. Some of these areas (Five Bar, Three Forks, Fletcher Trails, Granite Creek, Sand Springs, Navaro, Ryegrass, and Bull Creek) are receiving significant impacts. Vegetation is denuded on the immediate area of trails and where livestock are gathered and concentrated for short periods of time while moving between pastures or allotments. The scenic and aesthetic quality of these areas are diminished as a result of livestock grazing, trampling, and defecation. Since many of these sites are also used for camping, recreation experience is negatively impacted. In addition, cultural sites are degraded from cattle concentrated on sites. Livestock milling breaks artifacts, compacts the ground surface and mixes the artifacts, breaks down river banks, and promotes erosion that can wash away parts of sites.

Issue 8: Should livestock use of the river corridors be considered part of the cultural ORV?

Issue Description: Livestock use of the corridor is considered by local livestock operators to be a cultural ORV. This issue was raised after review of the draft plan. Livestock permittees consider the use to be part of the "culture and custom" of the area, and therefore should be considered a cultural ORV. Livestock use of the Jordan Valley/McDermitt area has occurred since the late 1860's, and represents the major industry of the area. Much of this grazing use has historically been dependent upon the availability of naturally occurring water from the river and other sources, and livestock trails which allow cattle to be moved across the corridor from one allotment or pasture to another.

Based on review of the Act, the house and senate committee reports, and the congressional record, livestock use within the Wild and Scenic River corridor is treated as a "land use" rather than an ORV. It is the BLM's understanding that congress recognized livestock grazing as an existing land use within the corridor, and that such use may continue so long as consistent with protection and enhancement of ORVs.

Issue 9: **How should wild horse use be managed within the river corridors?**

Issue Description: Livestock permittees contend that horses are impacting ORVs and cattle are blamed.

Issue 10: How should the Three Forks Cabin and Corral which is located on public land be managed?

Issue Description: The BLM, the affected livestock permittee(s), and the public have expressed concern over what use of the cabin and corral is appropriate. The structures are on public land. A livestock permittee who trails livestock through the area uses the facilities for his operation. It has also been used by the recreating public for shelter and viewing.

Issue 11: How will BLM and state agencies cooperate to manage water quantity for the rivers' outstandingly remarkable values (ORVs)?

Issue Description: ORVs such as wildlife and recreation require varying minimum river flow levels throughout the year. The Wild and Scenic Rivers Act requires BLM to protect and enhance the ORVs that established the river as a federal designated wild river. BLM policy is to use the State's appropriative instream water right process to protect the flow-dependent ORVs. Oregon Water Resources Commission has approved the state's flow assessment for the Owyhee River. The flow assessment determined minimum flows needed to support recreation, fish and wildlife within the Scenic Waterway. These flows will assist the Oregon Water Resources Commission (OWRC) in making findings on pending applications and future water rights. The Oregon Department of Parks and Recreation has applied for instream water rights on the Main Owyhee River from the Idaho State Line to Three Forks and from Crooked Creek to Birch Creek: the Oregon Department of Fish and Wildlife has applied for instream water rights on the North Fork Owyhee River.

Issue 12: Does the BLM plan to exercise a Federal Reserved Water Right for instream flows for the Owyhee Wild and Scenic Rivers?

Issue Description: The Wild and Scenic Rivers Act specifically reserved the minimum quantity of water necessary to fulfill the purpose(s) for which rivers are designated. If exercised, a Federal Reserved Water Right for the Main Owyhee River would have a priority date of October 24, 1984, and for the West Little and North Fork Owyhee Rivers of October 28, 1988. BLM policy is to use the State's instream flow water right process to protect the flow-dependent ORVs within the designated rivers.

Issue 13: How will BLM, other federal agencies and State agencies cooperate to manage water quality for the rivers' outstandingly remarkable values (ORVs)?

Issue Description: ORVs such as wildlife, recreation and scenery require appropriate water quality levels. The Act mandates BLM to protect the ORVs for which the rivers were designated. The Oregon Department of Environmental Quality's Statewide Assessment of Nonpoint Source Pollution rated observed and recorded water quality problems on the Owyhee Wild River System as moderate. BLM is a cooperating agency with the State of Oregon in this assessment and is committed to the improvement of nonpoint source conditions impacting stream segments in the river system. Cooperation and funding for water quality monitoring between BLM and other federal and state agencies in the Owyhee Wild River System has recently been pursued with little success.

Issue 14: How should recreation use levels be managed?

Issue Description: Boating and other recreational uses in the canyons continue to increase and there is concern over potential impacts. On the Main Owyhee River, BLM has established limits on the group size of floatboating parties, but current group size may not be appropriate at certain campsites (especially on the middle section), and does not address the potential impacts to recreational experience from too many boats. In addition, campsite site size and location can change due to high water erosion and/or deposition thus changing use patterns and campsite availibility. Heavy recreational use if uncontrolled can result in negative impacts to vegetation, soil stability, recreation, and other ORVs such as cultural and wildlife.

Issue 15: Should BLM provide potable water, i.e., establish water caches and/or develop springs for boaters?

Issue Description: Some private boaters are concerned about the remoteness of Owyhee canyon and the lack of potable water.

Issue 16: How should BLM manage non-motorized trail uses within the Owyhee Wild River System?

Issue Description: There has been some interest in constructing a hiking trail system within the Owyhee Canyon and its tributaries, such as a North Fork Owyhee trail from the Idaho BLM campground to Three Forks. Existing trails within the river corridors include wildlife and livestock trails and old pack-trails and wagon roads. Currently, use levels are low due to the remoteness of the area and difficulty in hiking in and out of the steep canyons. Other concerns include impacts on raptors and bighorn sheep and defining what constitutes outstanding primitive type recreation opportunities.

Issue 17: How should BLM manage recreation within the Anderson Crossing area?

Issue Description: The West Little Owyhee River provides approximately 56 miles of river canyon with only one designated vehicle access point (Anderson Crossing). Some impacts to vegetation from off-road vehicle travel, horses, livestock, and recreation use. Impacts from camping activities such as litter accumulation have also occurred. The area provides opportunities for an exceptional level of solitude and primitive type recreation.

Issue 18: How should BLM manage recreation within the Three Forks area?

Issue Description: Three Forks is a primary recreation site of the Jordan Resource Area and receives high levels of recreation use such as boating, hunting, fishing and hiking. It is the launch site for the middle section of the Owyhee River. Management concerns include sanitation, off-highway vehicle use, litter, impacts to vegetation from people, livestock and horse use, as well as impacts to private land caused by the recreating public, human-caused fires, and the discharge of firearms.

Issue **19:** What is the function of the Rome Launch Site?

Issue Description: This site's main function has been for the management of the Owyhee River and visitor service for river users. Since the Vale BLM manages the commercial permits for the entire river system, covering three states, Rome Launch site is an important contact point. It also provides the recreating public with a point of contact for information on the recreation opportunities within the Jordan Resource Area. There has been some interest in providing a state highway rest stop in the area of Rome.

Issue **20:** How will **BLM** manage solid human waste and campfire impacts **within** the river corridors?

Issue Description: Currently, BLM requires all commercial boating parties to carry out solid human waste: BLM requests all non-commercial parties to do the same. Information on solid human waste carry-out methods has been provided both as mail-outs and by river rangers at Rome. Malheur County requires campfires, within 1/4 mile each side of the Main Owyhee River, to be contained within a firepan. Campfires are still being built without firepans, leaving charcoal and litter impacts.

Issue 21: How **will BLM** obtain compliance with the mandatory boater registration requirement of registering with **BLM** prior to launching?

Issue Description: The 1986 Owyhee plan established mandatory registration of boaters. Parties are launching from private land and public land without registering with BLM. BLM river rangers are not able to make contacts with visitors to educate them on river safety and ethics, private land concerns, cultural resource concerns, etc. Also, private land owner permission is not always obtained by boaters before launching.

Issue 22: Should **BLM** check and approve boaters **for** safety gear?

Issue Description: There is some local concern about the county having to pay for Search And Rescue (SAR) and that the BLM should provide more education and regulation on boater safety. This is a wild river and includes a certain level of risk. Oregon law requires boats of all types to carry life preservers for each person on board. BLM requires boaters to register at the launch sites. River rangers check for firepans, adequate life vests and other equipment as much as possible.

Issue 23: **Should BLM provide** a higher level of visitor service **on** the rivers?

Issue Description: BLM, river visitors, and private land owners have expressed a need for a higher level of visitor service both on the river and at Rome Launch Site.

Issue 24: Will motorized **watercraft** be allowed on the designated **rivers?**

Issue Description: Some groups have expressed concerns that any motorized use impacts other uses and resource values, while others contend it is needed and is a legitimate use of the river. No motorized boat use exists on the West Little Owyhee or the North Fork Owyhee Rivers. The current management plan for the Main Owyhee (completed in 1986) authorized ten horsepower or less downstream motor use only; jet boats and upstream motors are prohibited. The Oregon State Marine Board (OSMB) developed state regulations after the management plan was completed. OSMB regulations allow jet boat use on approximately 18.5 miles of the wild river from the Owyhee Reservoir to Morcum Dam area (approximately 1 mile upstream from The-Hole-in-the-Ground) on the Main Owyhee River. Other types of motorized watercraft such as jet skis are becoming increasingly popular on other rivers.

Issue 25: How is aircraft use managed?

Issue Description: Some people have indicated a desire to land aircraft in the canyon and unauthorized landing of aircraft within the river corridors occurs. Others are concerned about the protection and enhancement of ORVs, the conflict with other users, and the impact upon resource values. The previous management plan established no airstrips or landing of aircraft on public land within the Owyhee National Wild River corridor.

Issue 26: How should access into the Birch Creek Ranch be managed?

Issue Description: Birch Creek Road is primitive, 4-wheel-drive-recommended access. The heavy use season usually coincides with the spring thaw and it and the Cow Creek Road get heavily rutted. Erosion and resource damage (reduced vegetation and water quality) are concerns. Both roads are currently under the Malheur County Transportation Departments authority/responsibility. Vehicles accessing Birch Creek Historic Ranch Area from the north (on the west side of the river) create impacts to the river resources (i.e., denude riparian vegetation, erode river banks, disturb the river bed, and degrade water quality). Vehicles fording the river also create problems for management and security of the Morrison site (i.e., theft and vandalism).

Issue 27: What action should be taken with regard to public access on roads to the Owyhee Wild River System?

Issue Description: The 1986 Owyhee Wild River plan authorized primary motorized vehicle access points for the main Owyhee as Three Forks, Rome launch site, and Leslie Gulch. The plan noted secondary access routes (requiring private land owner permission) as Birch Creek, Bogus Creek, The Hole-in-the-Ground, and Black Rocks. The Birch Creek and The-Hole-In-The-Ground Roads no longer cross private land. Concerns include maintenance of BLM and county roads, public access across private lands, looting and vandalism of cultural resources, and the Red Butte Road (west side of the river north of Morrison property) which was not mentioned in the 1986 plan as an access point.

Issue 28: How will State lands within river corridors be managed?

Issue Description: The BLM in Oregon has signed a Cooperative Management Agreement (CMA) with the Oregon State Parks and Recreation Department and the Oregon State Marine Board to work together to manage those rivers or river segments that are both Federal Wild and Scenic Rivers and State Scenic Waterways. Therefore, this existing CMA guides general management of the Owyhee from the Oregon-Idaho stateline to Three Forks and from Crooked Creek to Birch Creek (the areas of dual designation). However, portions of the North Fork and mainstem contain state land of which the Oregon Division of State Lands (DSL) is the managing agency. DSL is concerned about their existing grazing leases and grazing management of their lands within the designated river corridors.

Issue 29: How will Bureau of Reclamation (BR) withdrawn and acquired lands be managed within the river corridor?

Issue Description: Confusion exists over agency management of lands within river corridor. BR has both withdrawn lands and acquired lands within the lower 10 miles of the Main Owyhee designated Wild and Scenic River boundary. During development of the 1986 Owyhee River plan, BR agreed to proceed with revocation of those withdrawals within the river corridor. Since revocation has not occurred, BR is interested in cooperatively managing the lands in question.

BR is also studying the possibility of raising the height of the Owyhee Dam in order to hold more water for salmon downstream. This action would flood a portion of the designated section of the Owyhee River. The action would have to be approved by Congress who would have to look at protection of Salmon and protection of a Wild and Scenic River. Therefore, this proposal by BR is outside the scope of this plan.

Issue 30: How will Federal Energy Regulatory Commission power site withdrawals be managed within the river corridors?

Issue Description: Numerous Federal Power Commission power site withdrawals exist within the Owyhee System and BLM has limited jurisdiction/management authority on them. (A 1966 Cooperative Management Agreement established certain management authorizations and restrictions for BLM on power site withdrawals.) The Wild and Scenic Rivers Act states that "The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works...on or directly affecting any river which is designated in section 3 of this Act..."

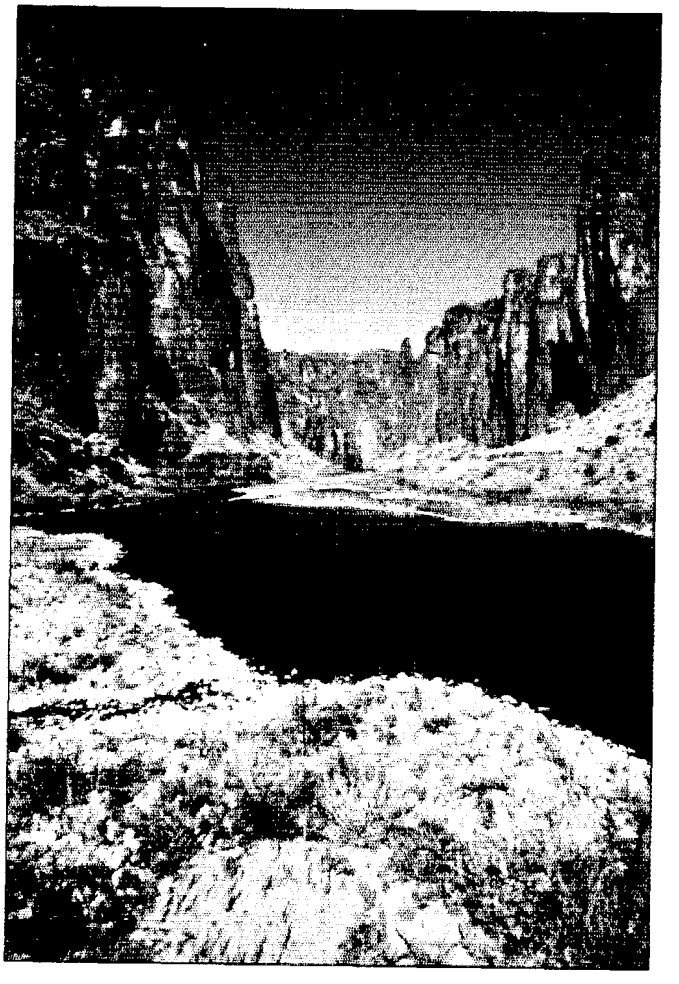
Issue 31: What private and/or state lands will BLM acquire or exchange within the riser corridors and how will it affect the county tax base and common school fund?

Issue Description: The goal of the Wild and Scenic Rivers Act is to provide protection for the rivers within the federal system. This includes the authorization to acquire lands and easements from *willing* land owners to assist in that protection. Some concern exists regarding loss of revenues for the common school fund from state land and reductions in the county tax base from private land. BLM is currently involved in state land exchanges (which may affect the wild river corridors) and private land acquisitions which do affect the wild river corridor on the Main Owyhee River.

Issue 32: How should Wild and Scenic River boundaries (for the North Fork and West Little) be set in order to provide appropriate management of resource values and minimum encroachment on private and state lands?

Issue Description: Preliminary boundaries were developed to include the important resources along the river corridor and within the rivers' immediate environment. Some of the boundaries, especially the North Fork, includes private and state lands. These land owners are concerned with restrictions on their use of the land and the potential for future development. The Owyhee River boundary was developed by the Owyhee Wild River Plan Ad-hoc group and made permanent in the 1986 plan.

2. Management Direction



Desired Future Conditions

Desired future conditions present a vision of the desired future state of a specific area or resource. This vision helps provide a focus for ongoing management. The desired future conditions that follow were developed for the Owyhee Wild River System corridor resources after public and interdisciplinary team input.

Scenery

Scenery is an outstandingly remarkable value for all three rivers. The major features of landform, water, vegetation and the absence of many structures or disturbances all contribute to the natural landscape. Very limited unnatural alterations (caused by man or livestock) to the natural landscape features and their elements of form, line, color, and texture are allowed. Contrast ratings are used on proposed projects to evaluate alterations to the natural landscape.

Geology

Geologic features that support scenic river values are protected. New mineral exploration and development within the viewshed of the Main Owyhee is nonexistent. Valid existing mineral development (outside the administrative boundary but within the viewshed) continues to be in compliance with federal, state and county laws.

Vegetation

Vegetation is a key component of the visual resource, important to watershed values, wildlife habitat, and is a vital part of the natural setting for recreation. All of these resources (scenery, wildlife and recreation) are ORVs for which the rivers were designated. Vegetation contributes to the outstanding character of the ORVs and is managed to protect and enhance these resource values. The overall natural appearance of the river corridors is dependent upon the visual aspect, condition and trend of the vegetative resource. Species of special status receive special emphasis for protection. Human influenced impacts to the vegetation resource are minimized or eliminated.

Cultural

Cultural sites that possess scientific and educational values and that are not significantly degraded are protected; maintained and stabilized. Significantly altered sites are salvaged by excavation to extract the remaining scientific information and the area returned to a natural state. Visitor's appreciation of cultural resources is enhanced through interpretation of the cultural resource and enforcement of cultural resource protection laws. Visitors promote site protection and positive stewardship of cultural resources.

Wildlife

Selected species and habitats within the river corridor are inventoried to establish baseline data. Habitat monitoring (from the baseline data) shows no significant impacts from human or livestock uses. Emphasis is given to the management and protection of critical habitats such as the aquatic river environment, adjacent riparian areas, nesting areas, and wintering areas. Species of special status such as California bighorn sheep, bald eagles, and Ferruginous hawks receive special emphasis. Overall habitat protection and enhancement is pursued within the primary goal of maintaining the wild character of the three river corridors.

Water Quantity

The Wild and Scenic Rivers Act specifically reserved the minimum quantity of water necessary to fulfill the purposes for which rivers are designated. The State of Oregon's instream flow water rights for the flow-dependent ORVs (such as scenery, recreation, and wildlife) are in place and protecting these values within the parameters of the natural system.

Water Quality

Cooperative efforts among affected federal, state, and local agencies ensure compliance with state water quality standards within the parameters of the natural system.

Recreation

Use levels provide for a high quality primitive type recreational experience while protecting the river values. The three wild river corridors provide opportunities for a truly unique wild, remote, nearly pristine experience, a very high degree of solitude, and unique interpretation/education of natural and cultural resources.

Management Goals

General Goal

The Main, West Little, North Fork Owyhee Wild River Management Plan will provide protection and enhancement of the outstandingly remarkable values of the Main Stem, West Little, and North Fork Owyhee Rivers (within the state of Oregon). These river segments shall be preserved in free-flowing condition and they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

Goals For Each Segment

Owyhee River Management Goals

Protect and enhance the outstandingly remarkable recreational, scenic, geologic, wildlife, and cultural values of the designated Wild and Scenic Owyhee River.

West Little Owyhee River Management Goal

Protect and enhance the outstandingly remarkable recreational, scenic, and wildlife resources of the designated Wild and Scenic West Little Owyhee River.

North Fork Owyhee River Management Goal

Protect and enhance the outstandingly remarkable recreational, scenic, and wildlife resource of the designated Wild and Scenic North Fork Owyhee River.

Goals Common To All Three Rivers

Ensure protection and enhancement of the values which caused the rivers to be designated without limiting other uses that are consistent with those goals and do not substantially interfere with public use and enjoyment of these values.

Provide visitor services to enhance enjoyment of the Owyhee River System while protecting the unique and sensitive resource values of the area.

Enhance visitor and land user appreciation of the important resources of these rivers.

Management Objectives, Actions and Rationale

Scenery

Objective: Manage the visual resource as a Visual Resource Management Class I (BLM Manual Handbook 8410-1, 1986) where only natural ecological changes and very limited management activities are allowed to modify the basic elements of the landscape and any contrast created within the characteristic landscape must not attract attention.

Actions: Manage the visual resources as seen from the river as a Visual Resource Management (VRM) Class I. Perform contrast ratings (BLM Manual Handbook 8431-1, 1986) to evaluate alterations to the natural landscape. Modify or deny activities that do not meet the allowances under a VRM Class I designation. Allowances are considered to be very low level of change to the characteristic landscape that must not attract attention.

Rationale: Scenery is an ORV and needs a high level of protection. It is BLM policy to manage all designated Wild and Scenic Rivers classified as wild as a VRM Class I. This VRM class provides for the highest level of protection of scenic values with minimal alterations to the landscape.

Mining

Objective: Insure that surface disturbance from mining does not impair the ORVs within the river corridors, within the 1/2 mile area Congressionally withdrawn from mineral entry upon designation, and within the area extending out to the administrative boundary.

Action: Prepare and submit an application for mineral withdrawal on 11,300 acres of public land, outside the mineral withdrawl but within the administrative boundary of the Main Owyhee River. Manage mining in the area between the 1/2 mile mineral withdrawal boundary and the administrative boundary of the West Little and North Fork Owyhee Rivers under VRM class I objectives and guidelines. A no surface occupancy stipulation will be in incorporated into all mineral cases and sales within the administrative boundary.

Rationale: Since scenery is an ORV, BLM cannot effectively protect and enhance this ORV if mineral exploration and development occurs. No mining claims exist within the three river corridors, therefore no current use will be impacted by this action. Decisions in the 1983 Management Framework Plan (MFP) and the 1986 Owyhee River plan allow excluding mining within the designated Main Owyhee River corridor. However, the land use allocation of a mineral withdrawal for the West Little or North Fork Owyhee Rivers was not included in the 1983 MFP. Therefore, VRM guidelines and objectives and 43 CFR 3802 and 3809 regulations will be used until the new Resource Management Plan (updated term for the MFP) can analyze the proposal to withdrawal the area from mineral entry.

Acquired Lands

Objective: Manage the Historic Owyhee River Ranch (Birch Creek and Morrison Ranches) as an historic rural landscape and provide public use and enjoyment of this unique area, consistent with protection and enhancement of the ORVs, by:

1. Maintaining the integrity of the buildings, structures, and landscape features that contribute to the Historic Site.

2. Increasing cultural and natural resource education/interpretation of the area.

3. Controlling recreation use and potential impacts through facility development.

4. Maintain all existing surface water rights on lands acquired within the Owyhee Wild and Scenic River Corridor to protect and enhance the ORVs (wildlife, cultural, scenic, and recreation) by maintaining, establishing, or reestablishing vegetation composition of these areas.

Action **1:** Nominate the Historic site to the National Register of Historic Places.

Action **2:** Provide repair and scheduled maintenance of Historic Site contributing elements.

Action **3:** Rehabilitate the cultivated fields, returning them to a more natural appearing pastural setting. Water delivery systems (irrigation ditches and /or pipelines) will be maintained to supply water to the (historically irrigated) fields as needed. Pump sites exist on the Birch Creek and Morrison properties to transport water to the fields. If the historic value of restoring the waterwheel upstream of the Morrison Ranch site warrants, and if feasible, the waterwheel may be repaired to supply water by historic means. If the water rights are no longer needed for management of the ranches, lease the water right to the State of Oregon as an instream flow.

Action **4:** Develop interpretive brochures and install signs providing visitors with information on the cultural and natural values of the area. Use one of the existing buildings, such as the older Birch Creek Ranch house, as an interpretive station to display area artifacts and information for visitors.

Action **5:** Provide a camping/parking area including permanent toilet facilities and an adequate boater take-out/put-in facility for non-motorized boat use, in a manner consistent with protection and enhancement of ORVs.

Action **6:** Develop partnerships with interested groups and agencies to use the Morrison Ranch site as a research station, environmental education site, science camp, etc. Explore the feasibility of public rental of the Morrison Ranch site. If partnerships are not found and if funding is inadequate to operate the facility, leasing to a concessionaire for public use may be pursued.

Action **7:** Relocate or close a portion of the Morrison Ranch facility maintenance road (near north end) where it impacts habitat of Ertter's groundsel (*Senecio ertterae*), a candidate for listing under the Endangered Species Act.

Action **8:** Extend the interim no shooting zone to include the area of the old dump site up river from the Birch Creek field and make it a permanent restriction. The legal description for the no-shooting area is T29S, R43E, Section 7: E1/2SW1/4 and E1/2, and Section 18: E1/2NW1/4 and NE1/4.

Action **9:** Prepare a resource site plan for detailed, site specific actions. The site plan will include decisions on maintenance, stabilization, restoration, removal and/or additions to the buildings, facilities, roads, fences, ditches, waterwheel, etc. Site specific decisions on uses and facilities for cultural, recreation, wildlife, range, and special status plants will also be included.

Rationale: The National Historic Preservation Act mandates BLM to protect and maintain the integrity of historic sites. Maintenance and repair must conform to the Secretary of the Interior's Standards and Guidelines for Rehabilitation (Sec. 110 of the National Historic Preservation Act). The Historic Ranch area offers exceptional recreation opportunities for visitors to the Owyhee River. Interpretation of the historic and prehistoric attributes and the natural values of the area will provide Owyhee visitors with a unique opportunity and enhance their appreciation of the river. Maintaining the character of these properties in an historic pastural setting is a benefit to

the cultural historic ORV. Reducing or eliminating erosion and weed infestation on these fields will help protect and enhance the wildlife, scenic and recreation ORVs. All signs and development will be compatible or in harmony with the historic landscape.

Objective: Improve the Main Owyhee River corridor ORVs by returning The-Hole-in-the-Ground ranch site to a more natural appearing setting that blends with the natural landscape, and is consistent with the Wild and Scenic Rivers Act and the objectives of this plan. (Refer to EA #93OR-030-92-44)

Action 1: Evaluate the property to determine eligibility for inclusion to the National Register of Historic Places (NRHP). If any structures qualify, manage them within appropriate cultural resource laws and the objectives of this plan.

Action 2: Remove all structures, i.e., fences, buildings, etc, that do not qualify for the NRHP.

Action 3: Rehabilitate the cultivated fields. The water right will be maintained by supplying water to the appropriate lands to re-establish native vegetation. If the water right is no longer necessary to meet objectives, lease it to the State of Oregon as an instream flow.

Action 4: Inventory camping areas and uses.

Rationale: Restoring this setting to a more naturally appearing landscape will enhance the scenic ORV. Evaluation of the property to determine NRHP eligibility will assist in establishing cultural resource protection measures. Rehabilitation efforts on the deteriorating fields will benefit the scenic, recreation, and wildlife ORVs by reducing erosion and weed infestation, providing a more natural appearing landscape and primitive recreation setting, and improving wildlife habitat.

Cultural

Objective: Identify and evaluate the significance of prehistoric and historic cultural sites by inventorying the three river corridors. Protect, maintain and stabilize relatively intact cultural sites that possess scientific and educational values from vandalism, erosion and livestock trampling. Salvage by excavation those sites that have been significantly altered. Decrease occurrence of vandalism by increasing use supervision, visitor education, and law enforcement efforts.

Action 1: Complete cultural resource inventory and evaluation of all three river corridors. As priority, focus on present day recreational campsites, livestock use areas, and significant sites such as rock shelters and petroglyphs. Recommend eligible sites to the National Register of Historic Places.

Action 2: Through the inventory and evaluation of sites determine if cultural resources is an ORV for the West Little or North Fork Owyhee Rivers.

Action 3: Where practical, stabilize significant sites that are adversely affected by human and livestock impacts, and natural forces by restricting use, fencing, and rehabilitating disturbed sites.

Action 4: Excavate sites such as dug and looted rock shelters, stratified sites with bank erosion, deflated/eroded surface sites to retrieve the remaining scientific data.

Action 5: Provide visitors with education, interpretation, and information designed to minimize visitor impacts and to encourage appreciation of cultural resources. Include this information in commercial permits, boating guides, bulletin boards, signs, brochures, interpretive displays, and through personal contact. Provide cultural resource protection information to school children through class talks, distributing BLM educational film, and encouraging school class site stewardship.

Action **6:** Provide for aggressive cooperative law enforcement for the protection of cultural resources. BLM law enforcement personnel will participate in river and trail patrols. Coordinate with other law enforcement agencies such as the County Sheriff's Department and the State Police on patrols of the river corridors. Encourage County Sheriffs and State Police to participate in river patrols.

Rationale: Cultural (prehistoric and historic) is an ORV for the Main Owyhee River and may be for the West Little or North Fork Owyhee Rivers. Cultural resources have educational, aesthetic, and scientific qualities that the BLM is mandated to protect and preserve.

Fish

Objective: Improve our knowledge of fish populations in the designated rivers by completing an inventory within five years to determine species type, abundance and habitat condition.

Action: Inventory the three rivers to determine if candidate species such as redband trout exist. Evaluate data and if impacts to fish or fish habitat are occurring from activities along or within the rivers, take remedial action necessary to protect the fish/fish habitat. Coordinate this work with ODFW. After inventory and evaluation work is complete, determine if fish is an ORV, or contributes to the wildlife ORV for any of the three rivers.

Rationale: Special status fish such as redband trout may exist within the West Little and North Fork Owyhee Wild Rivers and side streams within all three river corridors. Inventory work will help determine if the species exists, the condition of the habitat, and whether or not actions should be taken to protect and enhance.

Wildlife

Objective: Coordinate wildlife management efforts with ODFW and other agencies.

Action: Work closely with ODFW and other agencies to ensure fish and wildlife and their habitats are protected within the river corridors.

Rationale: ODFW manages fish and wildlife populations and BLM manages habitat. The Owyhee River is an Oregon State Scenic Waterway as well as a federally designated Wild and Scenic River. Close coordination and cooperation between the agencies is essential to protect the wildlife ORV/Special Attribute.

Objective: Improve our knowledge of raptor populations in the canyons by completing an inventory of the canyons within five years.

Action: Data collected will include, but not be limited to, distribution, abundance, and number of nesting sites. Each year data will be collected concurrently with song bird surveys conducted by the biologist. Any action taken to protect raptors and/or their habitat will depend on specific impacts identified during the survey. Indirect methods such as education will be used before direct methods such as restricting or eliminating use.

Rationale: Wildlife values in the canyons are ORVs and the canyons are excellent raptor habitat. Ferruginous hawks are a candidate for protection under the Endangered Species Act.

Objective: Improve our knowledge of songbird populations in the canyons by completing an inventory within five years to document composition and relative abundance of songbird species utilizing the Wild and Scenic River corridors.

Action: Data collected will include, but not be limited to, species distribution and abundance. Each year, data will be collected concurrently with raptor surveys. Areas of emphasis will include willow stands (such as at the mouth of Jackson and Rhinehart Creeks), homesteads with trees, and springs. Any action taken to protect songbird habitat will depend on specific impacts identified during the survey. Indirect methods such as education will be used before direct methods such as restricting or eliminating use.

Rationale: The river canyons are important migration corridors and breeding habitats for songbirds and neo-tropical migrants. Many are species of concern due to decreasing populations. Wildlife values in the corridor are ORVs that contribute to the National Wild and Scenic River designation.

Objective: Within five years, ensure nesting Canada geese and broods are not unduly disturbed by activities on the river and in the corridor.

Action: Quantify any disturbance to Canada goose nests and broods by activities on the river and in the corridor. Record occurrence, location, and behavior of nesting geese and goose broods during river patrols and related activities. If data indicate geese are being displaced by river-use activities, an analysis will be done to determine the cause and significance of the impact. Actions may be taken to mitigate impacts if they are determined to be significant.

Rationale: There is concern over the potential disturbance of nesting geese and goose broods in the river canyons by river-use activities. Wildlife values are ORVs that contribute to the National Wild and Scenic River designation.

Objective: Maintain or improve California bighorn sheep habitat in the river canyons through cooperation with ODFW.

Action: Continue to supplement populations in the canyons as per Malheur County Bighorn Sheep Habitat Management Plan through facilitation of bighorn sheep releases by ODFW. Facilitation will include cooperation on environmental assessments and close coordination with ODFW, other agencies and affected interests. ODFW will monitor sheep populations within the corridors. If impacts to California bighorn sheep habitat are identified, actions may be taken to mitigate impacts.

Rationale: California bighorn sheep are a category II candidate for protection under the Endangered Species Act. Wildlife values in the corridor are ORVs that contribute to the National Wild and Scenic River designation.

Range

Objective: Maintain or improve the vegetative cover of key species and the visual aspect of native perennial plants, within the soil and vegetative capabilities of ecological sites, in the corridor by 1999. Maintain proper utilization on key species. Minimize livestock impacts on vegetation and soils, within the corridor, at water gaps/trail crossings, on uplands, and in riparian areas. Minimize livestock/recreation conflicts at water gaps/trail crossings by 1999.

Water gaps and trails, where livestock concentrate, include the following areas: Three Forks, Sand Hollow, Fletcher, Granite Creek, Sand Springs, Navaro, Ryegrass, and Bull Creek. All but Three Forks serve as water gaps for livestock while grazing in allotments along the river. These are areas where concentrations of livestock currently occur for varying lengths of time (i.e. while trailing from one pasture or allotment to another, or while watering).

Uplands of particular interest include: Deary Pasture, The-Hole-in-the-Ground, Greeley Bar, and Island Field (near Birch Creek). In these areas, the river canyon "opens up", the topography

within takes on a more rolling nature, and substantial amounts of upland vegetation occur on relatively flat, accessible terrain.

Riparian areas targeted for improvement include those that possess reasonable physical and environmental capability for ecological improvement through management. Areas, such as sand bars, that are frequently scoured by spring runoff with little or no potential for sustainable improvement are not included.

Action **1:** Inventory the river system to determine riparian areas and potentials.

Action **2:** Within the corridor, a maximum of 40 percent utilization will be allowed for key grass species in the upland areas, with the exception of the following winter allotments: Morcum, Quartz Mountain (Willow Springs and Red Butte pastures), Birch Creek (Island Field pasture), and Three Fingers (Blackrocks pasture). The portion of these allotments within the corridor will have a maximum utilization level, for key grass species, of 50 percent. Where significant sites exist, willow use within the corridor will be limited to a maximum of 30 percent of the current years leaders. Herbaceous riparian vegetation will be managed to insure a properly functioning riparian system. Management may include restrictions on use levels, seasons or where feasible and compatible exclusionary fencing. Key sites will be monitored and use levels and/or management may be revised, on a case by case basis, through the allotment evaluation process. Any changes in use levels and or management must ensure plan objectives are being met. Water gaps and trail crossings will be managed so that vegetative cover does not decrease and, if possible, increases. Alternate sources of water, fencing and improved herding practices will be utilized where possible to reduce or eliminate livestock impacts at water gaps and trail crossings. Primary focus will be given to areas where camping/livestock conflicts exist.

Action **3:** Adjust seasons of use, utilization levels, and/or grazing levels, where necessary, to meet the objectives. Utilize the interdisciplinary allotment evaluation process in considering management alternatives to minimize conflict, protect and enhance ORVs, and ensure consultation, coordination and cooperation with affected parties.

Action **4:** Grazing use during drought years will be adjusted to maintain a balance between authorized use, available forage and water. Livestock use within the river corridor will not be allowed to increase during periods of drought or at other times when forage and/or livestock water, in other parts of the allotment, are in short supply.

Action **5:** Authorized trailing within the river corridor will occur within one day (usually a 12 hour period) for each group or herd of livestock. No overnight stops, holding or gathering, on public land within the river corridor, will be allowed unless prior authorization is given by the BLM. Trailing at Three Forks normally will have 1 overnight trail in the Spring and a 3 overnight stops (one night per gather) in the Fall during gathering.

Action **6:** Where possible and compatible with existing management policy and direction, develop livestock holding facilities, outside of the river corridor, for gathering or trailing livestock (particularly in the Sand Springs and Three Forks areas).

Action **7:** Alternate water sources and trailing areas will be pursued in the ongoing coordination effort with affected parties, through the allotment evaluation process. Where it is possible to meet the livestock grazing demand (grazing preference) with regard to forage and water, outside of the river corridor, livestock use within the corridor may be restricted, or eliminated.

Action **8:** Provide public information that identifies water gaps and trail crossings, explains the livestock use that normally occurs in the area, and what actions are being taken to protect the areas ORV's. Make information available in brochures, packets, and at registration sites.

Action 9: If, through monitoring, it is determined that wild horses are negatively impacting ORVs appropriate actions will be taken to eliminate or minimize the impact, to allow for the accomplishment of plan objectives. Actions may include, but are not limited to, gathering to reduce numbers or developing alternate water sources.

Action 10: Authorize the Three Forks cabin and corral, for continued use by the affected permittee(s). Through permit stipulations, provide for protection and enhancement of the river ORVs.

Rationale: Water gaps and trails — Management will key on minimizing livestock impacts at water gaps and trail areas (occurring on less than five percent of the designated rivers), while still providing livestock water and trailing. Efforts will be made to insure adequate vegetative cover is left to protect these sites from erosion. Most of these areas are larger than typical water gaps and have many acres of accessible rangeland for foraging. Although these areas may be obvious to the recreating public, they represent a minor part of the river system and do not appear to significantly impair the recreating public's ability to have a primitive recreational experience. Soil disturbance will also be reduced. In addition, lighter livestock use of the river corridor will minimize the amount of livestock droppings at campsites, which will improve scenic and recreation values. Areas in early to mid seral ecological status (condition) will have the opportunity to improve. Developing holding facilities, where possible and compatible, and limiting the length of trail time in the corridor will reduce impacts to ORVs. Adjusting grazing use during drought years and at other times when forage and/or water are limited within the allotment as a whole, and restricting temporary shifts of grazing use (within allotments) to the canyons will protect ORVs. Restricting trailing use of these areas will reduce livestock impacts to ORVs, but at the same time allow livestock trailing to continue. While this five percent of the corridors is open to livestock, it is not all currently utilized to the same degree. Since the topography of these areas is usually more gentle, recreationists often utilize them for camping. Notifying the recreating public of areas where livestock may be encountered, and when livestock use occurs, will give site specific information upon which informed decisions may be made regarding campsite selection and type of experience one wishes to have. Those wishing to totally avoid cattle or areas that cattle have been will be able to plan accordingly. Those who enjoy seeing cattle or who wish to see historic cattle trails will have enough information to aid them in that endeavor. Authorizing the Three Forks corral and cabin under permit will allow for the continued use of these facilities for livestock trailing purposes and provide for the basic care and maintenance of the facilities. It is possible that these facilities may have historic significance, however no formal determination has been made to date.

Rationale: Upland areas within the corridor — The intent of the Wild and Scenic Rivers Act is to protect and enhance the outstandingly remarkable values (ORVs) for which the rivers were designated. Some of the ORVs that have been identified for protection and enhancement, such as scenic and recreational, are not easily quantified, since they are subject to the "eye of the beholder." Managing areas used by livestock so that the use is virtually unnoticed by the recreating public will protect and enhance these values, and help provide the type of experience intended by the "wild" designation. BLM will utilize the Visual Resource Management rating system to help quantify impacts and determine the need for action. Establishing the prescribed utilization maximums on the upland key species is consistent with keeping visual impacts, resulting from livestock use, to a minimum. Areas where the ecological status (condition) is in the early to mid seral stage will have the opportunity to improve. Winter range areas that have a maximum utilization level of 50 percent, on key grass species, exist on the northern end of the corridor where the character of the corridor changes from a majestic canyon setting to a more open, rolling setting. Elevations are lower, "green up" occurs earlier in the spring, and there are more imprints of man. Livestock use in these areas is better distributed, access to the river is less confined and impacts from livestock are less intense. Livestock tend not to congregate in the corridor as much as in the more confined reaches of the canyon to the south. Livestock are not present during the peak of the float period and the earlier "green up" tends to quickly mask the utilization that has occurred. Where livestock forage and water needs can be met above the rim,

reducing or eliminating dependency on the corridor, ORVs would be protected and enhanced without negative impact to livestock operations. This approach is in accordance with the Southern and Northern Malheur MFPs.

Rationale: Riparian areas within the corridor - Managing grazing use in riparian areas will protect and enhance scenic and recreational values by reducing the visual signs of livestock use (i.e. grazing, browsing, cattle droppings and soil disturbance), and will allow for improved cover, ecological condition, and possible improvement in water quality. Note that the greatest impact to water quality and riparian areas results from the natural tendency for this system to experience extreme fluctuations in water levels. The resulting flushing and scouring actions move a tremendous amount of sediment through the system. Establishment of grazing schemes that will meet the needs of riparian areas will allow the riparian communities to move toward a properly functioning condition.

Water Quantity

Objective: To protect and enhance the river-related and flow-dependent ORVs by providing adequate instream flows through the State of Oregon's water right process or, as a last resort, through exercising a Federal Reserved Water Right within the designated Wild and Scenic River sections of the Owyhee River and its tributaries.

Action 1: State of Oregon instream water rights have been applied for by the Oregon Department of Parks and Recreation for the Main Stem Owyhee River from Idaho State Line to Three Forks and from Crooked Creek to Birch Creek. The Oregon Department of Fish and Wildlife has applied for instream water rights for the North Fork Owyhee River. The BLM will utilize these flow levels (if approved by the State of Oregon) as the initial flow levels for protection of river-related ORVs.

Action 2: Oregon Water Resource Department flow assessments for minimum necessary flow levels will be applied to the West Little Owyhee River to protect flow-dependent values in these reaches.

Action 3: If it is subsequently determined that these are inadequate, and the State of Oregon determines that additional flows are unnecessary, the BLM will initiate actions to establish additional instream flows under a Federal Reserved Water Right. A Federal Reserved Water Right would be exercised only as a last alternative.

Rationale: Current BLM policy is to use the State's instream flow water right process to preserve the flow-dependent values for which the river was designated. The rationale for utilizing the State's instream flow levels for both the reaches that share dual State and Federal designation, and other upstream Federally designated reaches is based on the result of the Oregon Supreme Court's finding in *Diack v. City of Portland and Oregon State Water Resources Commission*. This decision held that Oregon Scenic Waterway statutes protect instream flows from water diversions (in and upstream of State designated reaches) that may degrade Scenic Waterway values. This finding means that new permits for the use of water will not be granted within or above a State Scenic Waterway if the proposed use affects flows necessary to protect Scenic Waterway values. The BLM will initially use these flow levels for each reach, as applicable. The Wild and Scenic Rivers Act explicitly authorizes a Federal Reserved Water Right for all designated rivers. A Federal Reserved Water Right would only be exercised if the State's appropriative instream water rights process and Scenic Waterway statutes are inadequate to protect the designated ORVs of the river.

Water Quality

Objective: Protect and enhance water quality for ORVs, riparian, and water resource values by decreasing livestock and human impacts on recreation sites and stream side vegetation. Improve

water quality where not meeting standards and criteria for surface waters of Oregon as contained in Oregon Administrative Rules; Chapter 340, Division 41 - Oregon Department of Environmental Quality: Owyhee River Basin.

Action 1: Establish baseline and cause-and-effect water quality monitor stations from May through October associated with identified recreational and livestock access and use areas where appropriate. Evaluate monitoring data yearly and implement recommendations of site evaluations to alter or limit use at these sites until standards and criteria are met and maintained. Develop instream and stream side projects where needed to aid natural stream flow characteristics and dynamics associated with water resources, recreational use sites, and riparian habitat.

Action 2: BLM will cooperate with, and identify water quality infractions to, those state and federal agencies that permit discharges and regulate water quality levels affected by land management and owner actions. BLM will work with state agencies in a cooperative effort on long-term, continuous flow gauging stations in the main channels of the Owyhee Wild River System for water quantity and quality information.

Rationale: Water quality constituent levels in the river corridor is a direct result of management actions taken by BLM, other federal and state agencies, private land owners, and the geochemistry of natural occurring formation outcrops, land forms and concentrations contained in receiving waters. BLM can control only those actions affecting water quality levels occurring on Public Lands initiated by the BLM. Currently, the flow gauge near Rome, Oregon provides the only water quantity information for the Owyhee System. Long-term flow gauges on the West Little and North Fork Owyhee Rivers would provide much needed data on these tributaries and the upper portions of the Main Owyhee.

Recreation Use Level

Objective: *Manage use levels to protect and enhance the exceptional primitive type recreation* opportunities available within the three wild river corridors consistent with protecting and enhancing other outstandingly remarkable values.

Action 1: Continue to manage visitor use through mandatory registration of all boaters, river patrols, use control period (1), boater group size (2), and unrestricted number of launches per day. If monitoring indicates that ORVs are being impacted or resource and social condition standards are reaching unacceptable levels, the number of launches per day established in the 1986 plan (3) will become mandatory. This would require establishing a permit system for all boaters which includes dividing the number of launches per day between commercial and noncommercial groups. Public participation would be sought in determining the number of launches per day between noncommercial and commercial boaters. If recreation use levels negatively impact ORVs within the corridor, such use levels may be adjusted by limiting the number of launches per day, party size, etc. A permit system for all boaters may be implemented if needed to protect ORVs. The visitor use requirements are described below.

Requirements*[1]	Upper Section	Middle Section	Lower Section
(1) Control Period	(1) April 1-June 30	(1) April 1-June 30	(1) April 1-June 30
(2) Group Size	(2) 15 people/group	(2) 15 people/group	(2) 20 people/group
(3) Launches/day	(3) 1/day each fork	(3) 4 launches/day	(3) 6 launches/day

Action 2: The adjoining BLM districts (Boise, Idaho; Elko, Nevada; Vale, Oregon) will coordinate issuing Special Recreation Permits to outfitters that provide services across district boundaries. Only one permit will be required from companies operating in one or more BLM district.

[1] *The control period is subject to change depending on river flow and visitor use. Group size includes boatmen and support personnel for commercial trips. Launches per day limits established in the 1986 plan will not be implemented until monitoring indicates a permit system for all boaters and allocation is necessary.

Through a cooperative agreement between the districts, the Jordan Resource Area of the Vale District will administer commercial permits on the Owyhee River System. Commercial operators must have the appropriate state licenses before obtaining a BLM permit. The cooperative agreement will be reviewed and updated every 5 years or as needed. The Vale District BLM will administer noncommercial and commercial boating use on the Owyhee River System in Oregon, and administer commercial boating permits for the Owyhee in Nevada and Idaho.

Rationale: Annual fluctuation in water flow and unpredictable weather conditions during the typical early use season result in an indefinite Owyhee River float season. The 1986 plan established the use requirements shown above, but did not require implementing the launches per day limits per river segment or determining the number of launches between commercial and noncommercial boaters. Under the 1986 plan, monitoring was to indicate the need to implement a permit system which would include mandatory number of launches per day and dividing launches between user groups. To date, monitoring has not shown a need for these requirements. Normally, the maximum launch per day use limits are only reached during the peak use period of Memorial Day Weekend. The monitoring process, which incorporates parts of the LAC process (see Appendix G), requires deciding what kind of resource and social conditions are acceptable on the Owyhee River System, then prescribing actions to protect or achieve those conditions. This monitoring program will indicate the need for implementing a permit system for all boaters. Public involvement provides the forum to determine the appropriate number of launches per day between commercial and noncommercial groups. The 1986 Owyhee Wild River Plan established the Vale BLM office as the administrator of all commercial permits and this plan will carry that decision forward. The highest level of commercial use occurs on the Oregon segments of the Owyhee River System. One permit reduces paperwork and provides more effective coordination for both BLM and commercial outfitters. BLM is charged with protection and enhancement of ORVs. Where recreation is one of several ORVs, actions must be taken when necessary to protect all ORVs and provide the primitive type recreation experience called for by the wild classification.

Recreation Opportunities and Facilities

Objective: Maintain the existing exceptional primitive type recreation opportunities on public lands within the Main, West Little and North Fork Owyhee River corridors (where the area is characterized by an unmodified natural environment) by restricting development and on-site human influence or controls.

Action 1: Strive to provide existing exceptional primitive type recreation opportunities by restricting development such as springs, water caches, signs, or trail systems within areas characterized by an unmodified natural environment unless necessary to protect and enhance ORVs.

Action 2: Complete canyon access and campsite inventories for all three rivers. Update campsite inventories based on water flows.

Action 3: Increase information on primitive type non-motorized trail use opportunities by developing brochures that include existing pack-trails, wildlife trails, etc. And, based on use levels, install visitor registration boxes at the trailheads of high use trails.
Action 4: Perform river and trail patrols and provide scheduled maintenance for campsites and trails reaching the moderate impact standard. If the monitoring analysis shows that a campsite or trail has reached the maximum end of the moderate impact standard, campsite or trail use may be restricted to protect ORVs. If a campsite or trail rate out at the heavy impact level, it will be closed temporarily or permanently, depending on resource condition, and rehabilitated.

Rationale: In order to protect and enhance each rivers outstandingly remarkable values, and keep consistent with the classification of these rivers as wild river areas, restricting development and surface disturbing activities and reducing recreation impacts are necessary. Outstandingly

remarkable scenic, recreational, wildlife, and cultural values will benefit from restricted development. Documenting vehicle access to the wild and scenic river corridors and non-motorized trail access into the canyons provide prompt response for search and rescue situations and wildfires. In addition, this information will be used to record the amount of use and study suitability of providing primitive recreation opportunities such as hiking, backpacking, horseback riding, fishing, and hunting. Recreationist will be able to visit miles of this extensive river canyon area to boat, hike or horsepack in a primitive, non-motorized setting. Patrols and maintenance of campsites and trails will assist in ensuring a positive recreation experience and adequate resource protection.

Objective: *Improve the semi-primitive, motorized recreation opportunities on public lands* within the Main and West Little, and North Fork Owyhee River corridors (where the area is characterized by a predominantly natural environment, evidence of humans and human controls is present but low, and land based motorized use is allowed on existing roads) by:

1. Increasing information/education such as the natural, cultural and recreation values of these areas.

2. Managing campsites and trails to provide resource protection and a safe and healthy environment for visitors.

3. Increasing use supervision on holidays and high use periods.

Action 1: Install a bulletin board at Anderson Crossing on the West Little Owyhee to provide information and promote appropriate user ethics. If necessary, install signs and/or barriers to contain motor vehicle use to the road and permanent fire-rings to concentrate camping use and reduce campsite impacts. Patrol, monitor, and maintain the site.

Action 2: Develop a semi-primitive type camping area at Three Forks including installation of permanent toilet facilities and additional fire-rings to better concentrate camping use and reduce sanitation impacts. Increase information on the existing bulletin board to include vehicle use areas and restrictions, low impact recreation techniques, and interpretation and protection of natural and cultural resources. Patrol, monitor, and maintain the site. If necessary, install signs and/or barriers to control unauthorized motor vehicle use.

Rationale: The West Little Owyhee River provides approximately 56 miles of river canyon with only one designated vehicle access point - Anderson Crossing. The site offers vehicle access across the West Little Owyhee River and a base camping area from which to hike, fish, hunt, horseback ride, and explore the river canyon and surrounding area. Projected use levels for this site are not expected to approach use levels for sites like Three Forks therefore less development and human control/influence is needed. The Three Forks area provides many recreation opportunities such as float boating, fishing, hiking, hunting, horseback riding, and camping. The area receives considerable amounts of use during spring, summer and fall and is widely recognized (locally, regionally, and nationally) as an important recreation area. Increases in recreation use at this site have created increases in solid human waste and off-highway vehicle impacts. Livestock use coincides with spring and fall recreation use increasing use conflicts and cumulative impacts.

Objective: Improve the Rome Launch Site in order to enhance management of the Owyhee River System.

Action 1: Develop a permanent visitor/ranger station at the site. Improve existing toilet facilities, picnic tables and fire-rings for the physically challenged. Redesign the existing picnic area along the river to provide camping facilities.

Action 2: Work with the State of Oregon to locate a highway rest stop site other than the Rome Launch Site.

Rationale: The Rome Launch Site plays an important role in management of the Owyhee River System. It is a major contact point for visitors wanting to float the Owyhee Rivers and access the Owyhee backcountry. Visitors contact BLM rangers at Rome at all hours of the day and night to obtain information on recreation opportunities in the area and request assistance. BLM River Rangers are able to contact visitors personally and provide information especially safety information to boaters. The current visitor station is not accessible to the physically challenged. Developing a camp site area will provide for use that currently exists within the picnic areas along the river and elsewhere within the site. Although the launch site is open to all visitors, a highway rest stop is not an appropriate use of, or feasible facility for this site. The increase levels of use from a rest stop would create ingress and egress safety hazards, parking problems, overcrowding, and recreation use conflicts. Another rest stop location along this section of highway such as the Taylor Grazing Interpretive site would have less conflict and concerns.

Objective: Decrease solid human waste and campfire impacts within the Main Owyhee River corridor by requiring all boaters to carry-out their solid human waste and campfire debris and by increasing education efforts on these problems.

Action: Develop supplementary rules requiring all boaters to have a self contained solid human waste carry-out system and a firepan in their possession while recreating on the Main Owyhee River. Initiate this action over a two year period. Year one, notify boaters, through mail-out information packets, telephone conversations, and launch site contacts, this is the last year boaters will be able to recreate on the Owyhee without a toilet system or firepan. Year two, enforce the regulations and provide boaters, without the required equipment, information on where they can recreate without the equipment. If campfire or solid human waste impacts continue to increase inspite of management efforts, limits on recreation use will be implemented.

Rationale: Traditionally, boaters on the Owyhee either carry-out their solid human waste in plastic bags or dig shallow holes in or adjacent to their campsite. State and federal regulations now prohibit the dumping of solid human waste in landfills, except at a very limited number of highly specialized depositories. These regulations, for all practical purposes, have eliminated the effective use of the plastic bag carry-out method. Also, increasing visitation makes it obvious the shallow hole method is an unacceptable disposal alternative. Given the increase in boating use and the confined nature of the river canyons, the practice of burying human excrement is unacceptable. This practice is not compatible with protecting and enhancing ORVs and poses basic health risks that are unacceptable. The reusable toilet is a proven, effective, and responsible means of removing solid human waste from river corridors. Malheur County requires campfires, within 1/4 mile each side of the Main Owyhee River, to be contained within a firepan. However, campfires are still being built without firepans, leaving scattered charcoal and partly burnt wood on the beaches and benches. Also, the remaining fire pit(s) occupies limited camping space. Requiring all boaters to have a firepan in their possession while on the river will assist in reducing these impacts.

Visitor Education and Information

Objective: Eliminate occurrence of boaters launching without registering at Three Forks or Rome, or with the Boise or Elko Districts for the upper section.

Action: Work with local landowners to encourage boaters to launch at Rome. Work with commercial outfitters and whitewater groups prior to each float season to stress the importance of registration requirements. Develop supplementary rules for mandatory registration enforcement authority. Coordinate with the Boise and Elko Districts to ensure installation of registration boxes at put-ins and provide the Vale District with registration information annually.

Rationale: It is important for BLM to make initial contacts prior to parties launching to discuss proper safety gear and techniques, and use ethics, to encourage boaters (commercial and noncommercial) to give safety talks before launching, and to check boaters' compliance with the regula-

tions. The visitor contacts BLM river rangers make prior to launches can cut down on search and rescue (SAR) problems, resource impacts, and noncompliance because visitors will be more informed on equipment (such as life-vests and throw ropes), potential dangers, sensitive resource issues, and rules such as firepans, toilet systems, etc. Registration information is important for SAR operations and visitor use data. Registration data is a critical part of our monitoring program since it gives us a look at actual use levels that are correlated to resource and ORV impacts.

Objective: Improve visitor education and service on resource values, visitor/user ethics, and safety within the Owyhee River system.

Action 1: Provide more visitor information on potential campsites, rapids, use ethics, boater safety (including safety equipment and techniques), trails, and protection of ORVs. This can be accomplished through videos and brochures. Provide for staff contacts with visitors at Rome during control period. Develop signing, interpretive talks, and brochure(s) to promote education of natural, cultural, scenic, and recreation values, boater safety, river ethics, and land owner rights along the river.

Action 2: BLM will work with outfitters, private recreationists and groups, private landowners, and other agencies to schedule workshops (like the Partners Afloat/Partners Astride Program) to improve users' knowledge on river values and low-impact techniques, and to discuss outfitter, noncommercial, BLM, and other affected parties concerns.

Action 3: Work with Oregon, Idaho and Nevada sheriffs (with Owyhee River area jurisdiction) and the Boise and Elko BLM Districts on search and rescue operations.
Rationale: Improving visitor information and service will assist BLM with providing adequate protection for the river system ORVs and visitor safety. On-site information allows BLM the opportunity to make contact with visitors before they enter the corridor. Visitors then have the information they need to use the resources responsibly and reduce river impacts, accidents, and incidents. Cooperative programs such as Partners Afloat/Partners Astride provide a tool for recreationists, land owners, and land management agencies to improve understanding and communication, to foster an attitude of partnership, and to highlight common goals and values. The county sheriffs have primary responsibility for search and rescue. However, since BLM personnel are more familiar with the river corridors, have whitewater rescue training, and BLM equipment may be most available, cooperation may assist the sheriffs department in more effective search and rescue operations within the river corridors. BLM wants visitors to enjoy the river corridors, but also to be adequately informed and act responsibly.

Motorized Watercraft Use

Objective: Eliminate conflicts with primitive type recreation uses and impacts on outstanding opportunities for solitude and provide for a safe float-boating environment by prohibiting motorized watercraft on the Owyhee Wild River System.

Action: Prohibit all motorized watercraft use on the Owyhee River System (Main, West Little and North Fork Owyhee Rivers). Make permanent the current situation of no motorized watercraft use on the West Little and North Fork Owyhee Rivers. Coordinate with OSMB to develop and implement regulations prohibiting all motorized watercraft use on the Owyhee River System. BLM will develop supplementary rules for BLM enforcement authority. Post information at put-ins and take-outs.

Rationale: Motorized watercraft use substantially interferes with use and enjoyment of the ORVs. National Wild and Scenic River System protects rivers across the spectrum of development and uses. The Owyhee provides recreation opportunities within the undeveloped and primitive recreation use portion of that spectrum. These opportunities are growing exceedingly scarce due to technology, population and development growth. The Owyhee system enables

people to escape every day intrusions, and experience the wild character contained in the remaining isolated pockets of public land. Motorized watercraft disrupt solitude, primitive types of recreation experiences and wildlife within the river canyon. The Owyhee's physical attributes, rocky narrow canyons, have limited space in which to maneuver making motorized watercraft use a safety hazard to both motorized and float boaters.

Aircraft Use

Objective: Protect the outstandingly remarkable values of the river corridors from the impacts of aircraft use, by prohibiting aircraft landings.

Action 1: Prohibit all aircraft landings on federal lands within the river corridors (including the formerly private airstrips at the Morrison and The-Hole-In-The-Ground Ranches) and develop supplementary rules for BLM enforcement. Exceptions to this regulation may be authorized foı emergency and administrative situations.

Action 2: Close and rehabilitate the formerly private land airstrips at Morrison Ranch and The-Hole-In-The-Ground. Rehabilitate any unauthorized airstrips on public lands within the wild river corridors such as the one at Deary Pasture and the one downstream of Morrison Ranch.

Action 3: Improve clarification of aircraft use/restrictions in the river corridors through this management plan, the boating guide, and other brochures and news releases as necessary.

Rationale: Unauthorized aircraft landings are occurring within the Wild and Scenic River corridor. At least one area has been cleared of brush for use as a small landing strip. This use is not consistent with the Wild and Scenic Rivers Act or Wilderness Study Area Interim Management Policy and it is in violation of 43 CFR 8340 (regulations for off-road vehicle use which the solicitor states also refers to aircraft landings on public lands). The canyons' physical/geographical limitations for aircraft landings and wildfire potential create public safety hazards. In addition, aircraft landings substantially interfere with use and enjoyment of the wild river's ORVs. Refer to motorized watercraft action rationale.

Public Access - Motorized vehicles

Objective: Provide safe public access to the Main Owyhee River at Birch Creek by improving the existing Birch Creek Road with the minimal amount of blading, culvert installation, water bars, and low water crossings while protecting natural and cultural resources, and keeping consistent with Wilderness Study Area Interim Management Policy and the intent of the Wild and Scenic Rivers Act.

Action: Work cooperatively with Malheur County to provide safe public vehicle access to the Owyhee River at Birch Creek. Update the existing Cooperative Management Agreement with Malheur County Department of Transportation to include management of the Birch Creek Road. The Birch Creek Road requires culvert work, low water crossings, and blading in order to provide safer public access and reduce erosion problems. The road will remain as a four-wheel drive, high clearance type road. The road may be closed when it is too wet and slick to allow safe access and provide resource protection.

Rationale: Erosion, increased use, and safety concerns initiated the need to improve the Birch Creek Road. Visitation primarily occurs in the spring when the road is wet and most susceptible to damage. The action will improve the road surface allowing it to withstand more use, enhancing resource protection and visitor safety.

Objective: Reduce bank erosion and it's associated impacts to the Main Owyhee River at the ford north of the Morrison property and decrease the occurrence of vandalism and theft on the Morrison site by prohibiting vehicle use of the ford.

Action: BLM will work with the county and Bureau of Reclamation to prohibit vehicle use of the road on the west side of the river, north of the Morrison place from the ford to the Griffith Ranch at T. 27 S., R. 43 E., Section 6. This small segment of the road (approximately 2 miles) will be closed by 1995.

Rationale: The closure of the fords/access near the Morrison property is necessary for the protection and enhancement of scenic, recreation, cultural, and wildlife ORVs. Bank erosion, scenic quality impacts, and disruption of solitude at this ford area are not acceptable within a wild river corridor. In addition, the closure is needed to protect the historic rural landscape/ranch from vandalism and theft. This will not affect public access over the west rim in this area, nor access to the Morrison place from the south via Birch Creek.

Objective: Define vehicle access into the Wild and Scenic corridor by designating inventoried roads as either open or closed to vehicle access.

Action 1: Designate primary corridor access roads to Three Forks, Rome Launch Site, Birch Creek, Leslie Gulch and Anderson Crossing (Star Valley Road), and secondary corridor access roads to The-Hole-In-The-Ground and Griffith Ranch (Red Butte Road) as open to public access. No new access roads will be developed. The way from Bogus Creek to the river will be closed to vehicle access.

Action 2: Provide a scheduled routine road maintenance program for primary BLM corridor access roads, and provide minimal maintenance of secondary BLM corridor access roads to protect water quality, and allow limited access.

Rationale: Designating primary and secondary roads allows adequate vehicle access while reducing the severity of the intrusion on the use and enjoyment of the wild river's ORVs. Each of the river corridors can be accessed by vehicle, allowing visitors to then use non-motorized means to further enter the canyons. Refer to the motorized watercraft action rationale. A scheduled maintenance program for primary BLM access roads will allow for safe public access and protection of resources. Minimal maintenance of secondary BLM corridor access roads will provide resource protection.

State Lands

Objective: Improve cooperative management between state agencies and BLM for the protection and enhancement of ORVs (and Special Attributes) of the Owyhee Wild and Scenic River System.

Action: Pursue a Cooperative Management Agreement (CMA) with the Division of State Lands to cooperatively manage those lands under its authority within the wild river corridors to protect the outstandingly remarkable values. Maintain the existing Memorandum of Understanding (MOU) with Oregon State Parks and Recreation Department to effectively manage the Owyhee State Scenic Waterway. Include representatives from affected state agencies on river patrols.

Rationale: The BLM in Oregon has signed into a MOU with Oregon State Parks and Recreation Department and the Forest Service Pacific Northwest Region to work together to manage those rivers or river segments that are both in the federal river system and the state scenic waterway program. Therefore, the MOU guides general management and agency coordination of the Main Owyhee River from the Oregon-Idaho border to Three Forks and from Crooked Creek to Birch Creek. Oregon Division of State Lands (DSL) is not a party to this MOU, but they administer approximately 4% of the lands within the main Owyhee Wild River corridor and 37% within the North Fork Owyhee Wild River corridor. The CMA with DSL provides a tool to work towards cooperative management in protecting and enhancing the outstandingly remarkable values of the wild river corridors as is consistent with the Wild and Scenic Rivers Act.

Other Federal Lands

Objective: Consolidate federal agency jurisdiction and management of the Owyhee Wild River System.

Action 1: Initiate revocation of the Bureau of Reclamation (BR) withdrawals within the river corridor. Request jurisdictional transfer of BR acquired lands within the river corridor to BLM ownership. Pursue a CMA between BLM and BR to allow BLM management jurisdiction over BR withdrawn and acquired lands until revocation and transfer occurs.

Action 2: Initiate revocation of Federal Power Site withdrawals within the Owyhee River System.

Rationale: Through the Secretary of the Interior, BLM is required to manage the wild river corridor, but BR has withdrawals and acquired lands within the lower 10 miles of the designated administrative boundary and FERC has power site withdrawals throughout the designated main stem. BLM has limited management jurisdiction on power site withdrawals through a 1966 CMA with the Federal Power Commission. In order to provide more effective management of this wild river, BLM should have ownership and management of the federal lands within the river corridor. Revocation of withdrawals and transfer of acquired lands must be approved by the Secretary of the Interior. The CMA with BR will allow for coordinated management until revocation and transfers are complete.

Acquisition

Objective: Enhance management of the Owyhee Wild and Scenic Rivers through willing seller acquisitions of private and state lands.

Action **1:** Negotiate to acquire priority lands important to resource protection on a willing buyer/willing seller basis. On a willing seller/willing buyer basis, BLM will acquire (fee title, scenic easements, and exchanges) priori ty lands important to resource protection within the Owyhee Wild River System (see Appendix F for the acquisition list). If developed properties are acquired, BLM will manage them consistent with this plan and the mandates of the Wild and Scenic Rivers Act. As feasible and consistent with law and BLM policy, future land acquisitions within the designated river corridors will be managed to retain or be returned to a wild river environment.

Action **2:** Pursue state land exchanges to protect and enhance ORVs.

Rationale: A goal of the Wild and Scenic Rivers Act is to provide protection for the rivers within the National Wild and Scenic River System. The Act includes authorization to acquire lands and easements from willing land owners to assist in that protection. The State Scenic Waterway Program ensures protection from inappropriate private land development on scenic waterways through county zoning and review of the county permit process for developing/building on private lands. All agencies (local, state and federal) must work together to protect these rivers.

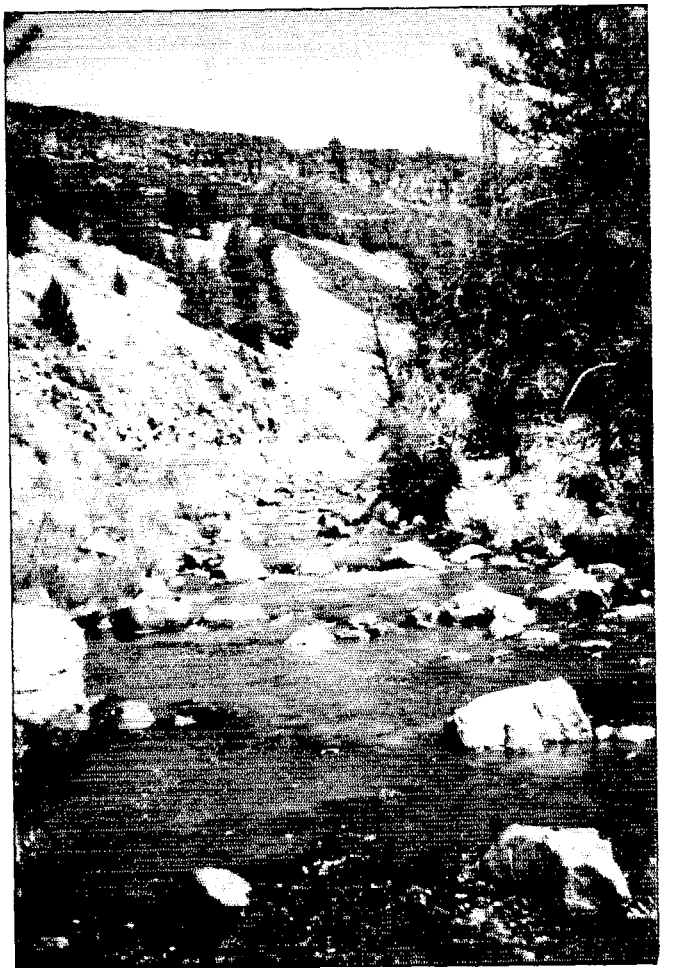
Administrative Boundaries

Objective: Develop permanent administrative boundaries for the West Little and North Fork Owyhee Rivers for administration and management of these Wild and Scenic Rivers.

Action: Set administrative boundaries for the West Little and North Fork Owyhee Rivers as shown on Maps 1A through 4B in Appendix J and as described in Appendix I. Maintain existing Owyhee River administrative boundaries which were designated in the 1986 Owyhee Wild River Plan.

Rationale: Preliminary boundaries were established in 1989 for the North Fork and West Little Owyhee Rivers. BLM staff established the preliminary boundaries to encompass the outstandingly remarkable values which resulted in the rivers' designation. The ORVs of both the West Little and North Fork Owyhee River corridors are scenery, recreation and wildlife. The main stem Owyhee River administrative boundaries were developed by an Ad-hoc team in the 1986 Owyhee Wild River Plan. No conflicts have arisen over this boundary, therefore, the Main Owyhee Wild River boundaries will be maintained. Administrative boundaries for the West Little and North Fork Owyhee Rivers will be final through the Federal Register Notice of this plan.

3. Monitoring



Monitoring

Monitoring is essential to ensure that the plan's goals and objectives are achieved. Monitoring measures the extent to which implemented actions are achieving management objectives. Periodic review of the implementation of the plan will determine the extent to which management actions have been implemented, and the extent to which further plan adjustments are needed.

At the end of each fiscal year, the status of each management action will be documented in a report. The report will include: a list of the management actions implemented, a list of the management actions partially implemented, a list of the management actions planned but not implemented, an overview of the monitoring results or indications, and recommendations for plan revisions to be considered or immediate actions needed to protect ORVs.

This planning effort used part of the LAC process (Appendix G) to develop Table 1 to establish values to be protected, indicators of those values, standards to measure the indicators, and monitoring programs to protect those values. Where baseline data is limited or nonexistant, inventory programs will be implemented to establish baselines in order to determine effective indicators, standards and monitoring programs to protect values.

Monitoring data will be evaluated in detail during formal interdisciplinary allotment evaluations and will be used to support recommendations on management alternatives/actions and/or plan modifications.

The monitoring strategy described below (Table 1) is designed to provide protection and enhancement of the river ORVs. It is not an end-all, answer-all to all concerns, but a dynamic process to assist BLM in managing towards the objective for which these Wild and Scenic Rivers were established.

TABLE 1 - MONITORING

Value to be Maintained and Enhanced	Key Indicator of Overall Condition	Management Standard to be Used	Monitoring to be Implemented
WATER QUALITY	Fecal coliform, temperature, dissolved oxygen, turbidity, macroinvertebrates, and other physical and chemical water constituents as warranted.	*Fecal coliform: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml. *Temperature: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 68°F. or greater; no more than 0.5°F. increase due to a single source discharge when receiving water temperatures are 57.5°F. or less; or more than 2°F. increase due to all sources combined when stream temperatures are 56°F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses of or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. *Dissolved oxygen: Dissolved oxygen concentrations shall not be less than 75 percent of saturation at the seasonal low, or less than 95 percent of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes. *Turbidity (Nephelometric Turbidity Units, NTU): No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. *State Water Quality Standards - Oregon Administrative Rule 340. These standards are currently under review by Oregon DEQ.	Establish water quality monitoring for baseline, cause-and-effect, and long-term stream conditions at sites determined by management objectives and Bureau policy.

Value to be Maintained and Enhanced	Key Indicator of Overall Condition	Management Standard to be Used	Monitoring to be Implemented
WILDLIFE Raptors - Concentrating on, but not limited to, Golden eagle, Ferruginous hawk, Prairie falcon	Composition, abundance, and number of nesting sites.	Will be developed from survey data	Establish a baseline for monitoring by conducting a systematic inventory of the canyon for nesting sites and population abundance. Implement monitoring programs based on results of the inventories.
Songbirds	Composition,relative abundance, and trend.	Will be developed from survey data.	Establish a baseline for monitoring by conducting a systematic inventory of the canyon. Implement monitoring programs based on results of the inventories.
Canada goose	Number of nesting sites and broods, and average brood size.	To be determined through surveys.	Record occurrence, location, and behavior of goose broods. If broods are unduly disturbed by activities on the river, implement actions to minimize disturbance.
California bighorn sheep	Distribution and abundance	"Reasonable numbers" as identified in the Supplemental Memorandum of Understanding between ODFW, Southeast Region, and BLM, Vale District.	ODFW will continue population surveys twice annually and coordinate with BLM per the MOU.
FISH Habitat for fish species	Instream features including pool-riffle-glide composition, woody debris character, percent stream shading and channel substrate. Data is derived from the microhabitat inventory methodology which has been used jointly among Oregon Department of Fish and Wildlife, BLM and USFS fishery biologists.	Guidelines for determining habitat adequacy will be taken from Best Management Practice standards identified by the American Fisheries Society. The most recent version of these guidelines was published in 1982.	Microhabitat inventory data will be gathered periodically in feeder streams and the mainstem of the Owyhee (at least every 10 years) to determine changes in important fishery habitat stream features. The substrate condition and sediment load present within the thalweg will be determined with the pebble count methodology. More frequent replications of these methodologies may be conducted.
Fish	Species	Recruitment and population structure standards as identified by ODFW. These standards will vary depending upon the fish species considered and fish productivity potential of each stream.	The BLM and ODFW will conduct periodic fish census work to determine the productivity and population structure of key fish species. Standard sampling methodologies will be used to gather this data.

Value to be Maintained and Enhanced	Key Indicator of Overall Condition	Management Standard to be Used	Monitoring to be Implemented
VEGETATION Water Gaps	Vegetative cover in relation to bare ground.	Vegetative cover will not be allowed to decrease as a result of livestock or wild horse grazing use.	Monitoring may include low level aerial photography, ground photo points and narratives, and line intercept studies. Other studies may be implemented to assess progress toward meeting the plan objectives. Monitoring data will be evaluated annually and during the formal allotment evaluation process to support recommendations on management alternatives.
Upland Plant Communities	Vegetative cover of key species, visual aspect of native perennial plants, utilization on key species.	Within the corridors, a maximum of 40% utilization will be allowed for key grass species in upland areas with the exception of the following winter allotments, Morcum, Quartz Mountain (Willow Springs and Red Butte pastures), Birch Creek (Island Field pasture), and Three Fingers (Blackrocks pasture). The portion of these allotments within the river corridors will have a maximum utilization level, for key grass species, of 50%.	Monitoring may include low level aerial photography, ground photo points and narratives, line intercept studies, and utilization studies. Other studies may be implemented to assess progress toward meeting the plan objectives. Monitoring data will be evaluated annually and during the formal allotment evaluation process to support recommendations on management alternatives.
Riparian Plant Communities	Vegetative cover of woody and herbaceous key species, visual aspect of native perennial plants, utilization on key species.	Willow use within the corridors will be limited to a maximum of 30% of the current years leaders. Herbaceous vegetation will be managed in order to provide a proper functioning riparian system.	Establish low level aerial photography and/or on-the-ground photo monitoring sites for vegetative condition and trend. Establish additional studies (transects, utilization, cross-sections, etc.) as needed and required.
Special Status Plants	Population extent, number of individual plants and population health.	All plant species which are Federal Candidates for listing under the Endangered Species Act will be protected and managed to ensure they do not become listed.	Conduct comprehensive inventories for sensitive plant species, during a variety of seasons, focusing on livestock and recreation use areas and unique soil areas. Special status species known to occur now (see Chapter Five) or determined through inventories to occur will be monitored annually to ensure the standard is not exceeded.

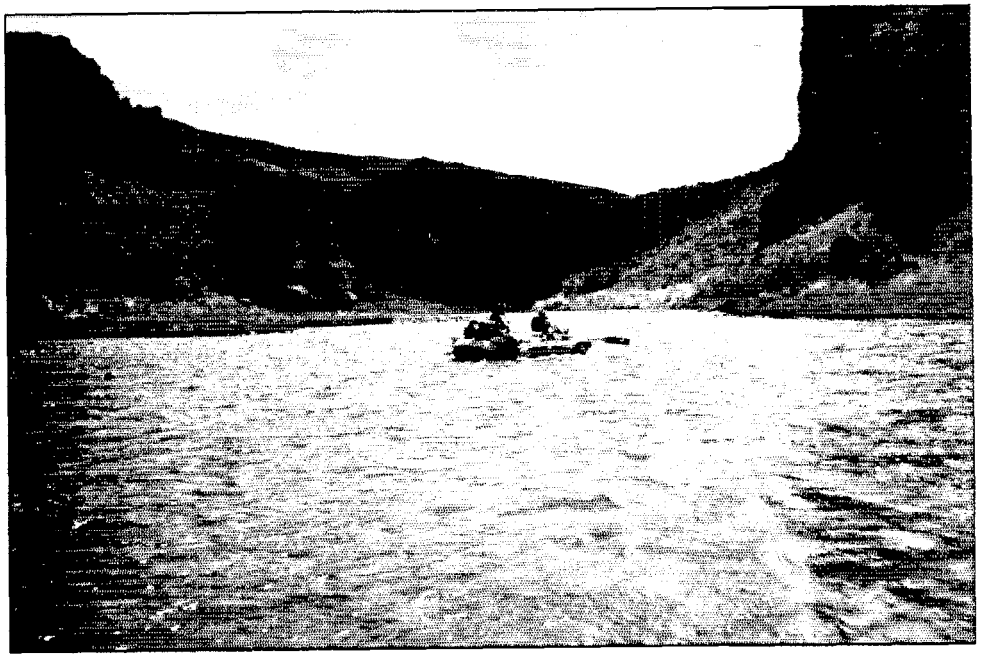
Value to be Maintained and Enhanced	Key Indicator of Overall Condition	Management Standard to be Used	Monitoring to be Implemented
CULTURAL Historic & Archaeological	Site Integrity (condition/trend)	No significant cultural resource which is being irreparably damaged by human use or eroded by natural forces to the point that it is in danger of being lost will be acceptable.	Inspect sites from established photo points and site maps and re-photograph. Monitor recorded sites in recreation and livestock high use areas twice per year, before and after use seasons. Monitor sites not easily accessible or in high use areas once per year. Monitor other sites every 2-3 years.
SCENERY AND GEOLOGY	Cultural modifications (human-caused changes) which would significantly alter landform, vegetation, water, color or character of the area.	Contrasts created by new management activities will not be allowed if they attract the attention of the casual observer within the characteristic landscape. Natural ecological changes will predominate.	Ongoing as proposals develop and supplemented with on-the-ground surveillance at least twice per year to detect possible unauthorized activities. VRM contrast ratings will be used for project proposal approval.

Value to be Maintained and Enhanced	Key Indicator of Overall Condition	Management Standard to be Used	[illegible]
RECREATION Float Boating	Quality of Experience	Upper Section: 15 people/group and 1 launch/day for each fork. Middle Section: 15 people/group and 4 launches/day. Lower Section: 20 people/group and 6 launches/day.	Evaluate boater and visitor registration info. Monitor float boaters at primary put-ins (Three Forks and Rome), rapids (The Ledge, Half-mile, Widow Maker, Bull's Eye, Whistling Bird and Montgomery) and take-outs (Rome, Birch Creek and Leslie Gulch) on a random week-day, weekend and holiday annually. Monitor: group waiting time at site, number of people/group, number and type of craft/group, and number of groups. Survey float boaters at primary take-outs for quality of recreation experience information on a random week-day, weekend and holiday annually. Verbal Survey: Use rating scales to analyze the degree to which float boaters feel the following resource and social conditions are being provided or managed: Put-in and take-out maintenance and cleanliness, availability and accuracy of information, river ranger performance, and crowding and time waiting at the boat ramp and rapids. River campsite availability and cleanliness; number of fire rings; extent of campsite trash, human construction, feces and toilet paper, denuded areas, trail proliferation, hacked or cut vegetation, livestock feces and associated loss of useable camp space, and soil damage. Livestock grazing along the river or in camp, and effects along the river or in camp. Debris along the river. Frequency of boating groups, other recreationists, aircraft or other diversions encountered.

Value to be Maintained and Enhanced	Key Indicator of Overall Condition	Management Standard to be Used	Monitoring to be Implemented
Camping	Quality of Experience		Quality of experience data gathered through the float boater and non-motorized trail use monitoring programs.
	Vegetative coverage, amount of human use, percent of campsite useable without livestock feces, extent of trailing, soil disturbance	Light Impact: 10% of the vegetation showing signs of trampling with no denuded area. The site is free of vandalism, human construction, feces and toilet paper, bare trails, and livestock feces. One trail present leading to or through the site with no spur trails. Only natural erosion is evident at the site. Moderate Impact: Vegetation is lessened throughout 30% of the site, increasingly lacking towards the primary use area and denuded in the center of the primary use area. Vandalism and/or human construction is present with no permanent damage. Livestock feces are present with 75% of the site determined useable for camping. Two distinct trails leading to or through the site are obvious with up to three spur trails. Abnormal soil compacting and loosening is evident with slight erosion. Heavy Impact: Vegetation adjacent to the site is intact. However, vegetation is increasingly lacking from the site boundary towards the center of the site. 50% of the site is denuded with shrub and tree roots exposed. Livestock feces are present with 25% of the site determined useable for camping. Three distinct trails leading to or through the site are obvious with more than three spur trails. Abnormal soil compacting and loosening covers 50% of the site with sustained erosion.	Monitor primary camp sites (based on historical and current use data) on the upper and middle sections of the Owyhee River each patrol using still and video photography from established photo-points and a monitor rating sheet. Monitor other camp sites as necessary depending on use levels. Monitor primary camp sites (based on historical and current use data) on the lower section of the Owyhee River using still and video photography from established photo-points and a monitor rating sheet. Monitor each primary site at the beginning and end of the float boat season. Monitor other camp sites as necessary depending on use levels. Monitor primary camp sites (based on historical and current use level) on the North Fork and West Little Owyhee Rivers on each patrol using still photography. Monitor other camp sites as necessary based on use levels. Monitor Three Forks camp site monthly from March through October using still and video photography from established photo-points and monitor rating sheet. Monitor Anderson Crossing camp site monthly from May through October using still and video photography from established photo-points and monitor rating sheet.

Value to be Maintained and Enhanced	Key Indicator of Overall Condition	Management Standard to be Used	Monitoring to be Implemented
Non-motorized Trail Use	Trail width, depth, percent slope, number of associate trails, erosion, and the need for trailhead and trail improvements or relocation.	Visitor use and resource impact information is limited for non-motorized trail use. Data obtained through the following monitoring requirements will be used to assess the need for hiking, horseback riding, hunting, fishing and other non-motorized trail use allocation standards. Trails breaking over the rim or through gaps into each canyon are either old pack, game or livestock trails. Develop trail maintenance standards that reflect the trails existing condition, defined as light, moderate or heavy impact. Trail maintenance standard assessment should evaluate the trail width, depth, percent slope, number of associate trails, erosion and the need for trailhead and trail improvements or relocation.	Monitor high use trails (based on historical and current use data) using still photography from established photo-points and monitor rating sheet on a random week-day, weekend, and holiday annually. Monitor other trails annually in the summer or fall using still photography from established photo-points and monitor rating sheet. Monitor: Number of people/group, number of groups, trail and trail head used, duration of trip, and type of activity. Also, include trail maintenance standards.
	Quality of Experience		Survey trail users at high use trail head and along trail specifically for quality of recreation experience information on a random week-day, weekend and holiday annually. Use rating scales to analyze trail users perception of: trail and trail head maintenance and cleanliness (human and livestock use effects), availability and accuracy of information, backcountry ranger performance, and crowding at trail heads and along trails campsite availability and cleanliness; number of fire rings; extent of campsite trash, human construction, feces and toilet paper, denuded areas, trail proliferation, hacked or cut vegetation, livestock feces and associated loss of useable camp space, and soil damage. Frequency of groups on trail and floatboating, aircraft or other encounters Livestock grazing along trail or in camp

4. Implementation



Overview

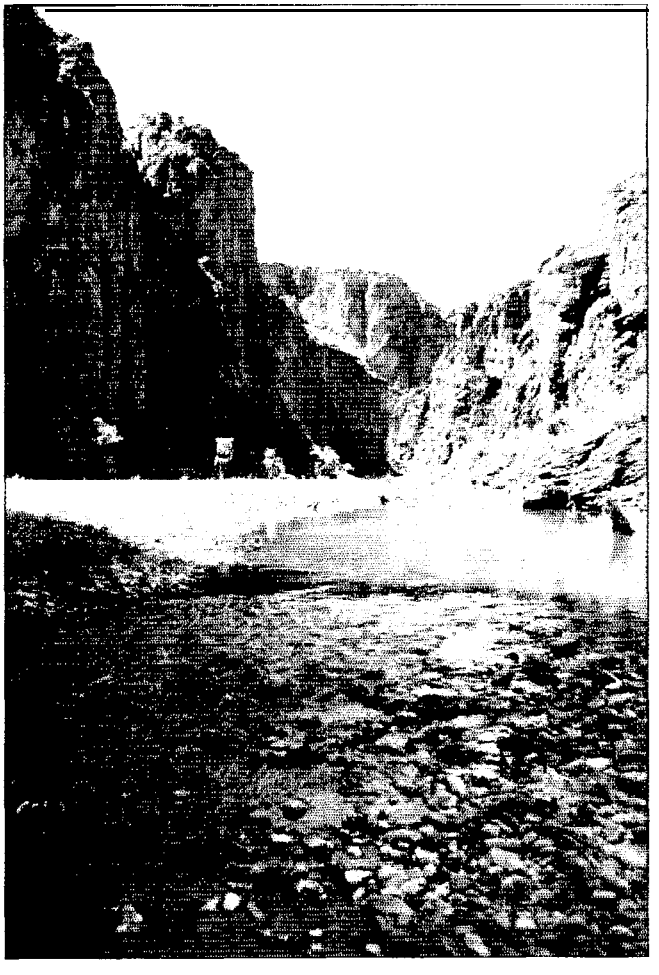
The Vale District is the organizational unit primarily in charge of implementing and administering this plan. Day to day responsibility is assigned to the Jordan Resource Area Manager. On the ground, operational responsibility is assigned to the Owyhee River Manager. Inventory, monitoring, design, construction, etc. will be assigned to appropriate staff specialists.

The implementation schedule and cost estimates for this management plan are shown in Table 2. This Table is divided into annual operation and management program costs, one time operation and management costs, construction cost for the Rome Launch Site, and land acquisition costs. Land acquisitions may occur through fee title purchase, easement purchase or exchanges, and will only occur on a willing seller basis. The annual operation and management cost figures include continuation of the existing river program on the Main Owyhee River.

Table 2. Implementation Schedule And Cost Estimates

Program Management & Operation		**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
VRM	$	5,000	5,000	5,000	5,000	5,000
Birch Creek Historic Ranch		66,000	66,000	66,000	66,000	66,000
Cultural		14,000	14,000	14,000	14,000	14,000
Fish and Wildlife		14,000	14,000	14,000	14,000	14,000
Special Status Plants		5,000	5,000	5,000	5,000	5,000
Range		14,000	14,000	14,000	14,000	14,000
Water		21,000	21,000	21,000	21,000	21,000
Recreation		110,000	104,000	104,000	104,000	110,000
Cooperative Mgt. with State Lands		2,000	2,000	2,000	2,000	2,000
Subtotal - Annual Mgt. and Ops.	**$**	**266,000** (5.5 Work Years)	**260,000** (5.5 WY)	**260,000** (5.5 WY)	**260,000** (5.5 WY)	**266,000** (5.5 WY)
One-Time Implementation Actions						
Inventories/Surveys						
Cultural	$	25,000	10,000			
Fish and Wildlife		25,000				
Special Status Plants		12,000	8,500			
Rangeland/Riparian		8,500				
Recreation			30,000			
Birch Creek Historic Ranch			251,000			
Water Flow Gauge Stations			25,000	25,000		
Recreation Development			40,000			
Road Closures		5,000	5,000			
Withdrawals			20,000			
Administrative Boundaries		5,000	5,000			
Subtotal	**$**	**110,500**	**364,500**	**25,000**		
Total Management and Operation		**376,500**	**624,500**	**285,000**	**260,000**	**266,000**
Construction						
Rome Launch Site	$		18,000	21,000	22,000	227,000
Land Acquisition						
Fee Title/Easement/Exchange	$	365,000	1,000,000	678,000		

5. Environmental Assessment



Introduction

This chapter contains the environmental assessment (EA) of various management strategies for the Main, West Little, and North Fork Owyhee Wild River Areas. An EA is required by the National Environmental Policy Act (NEPA) because the Owyhee River System Management Plan may have effects on the quality of the human environment. Its development follows regulations pursuant to NEPA (40 CFR 1500-1508).

The Main, West Little, and North Fork Owyhee Wild River System Management Plan EA OR-030-92-11 was devloped by the Vale District Office, Vale, Oregon. This chapter provides the reader with the complete EA including a detailed tabular comparison of each management alternative, the affected environment for each river in detail to provide the background necessary to analyze the management alternatives, and a detailed description of the short term, long term, direct, indirect, and cumulative effects of each of the alternatives on the affected environment.

Planning Area

The Owyhee River System planning area contains approximately 50,000 acres of public land, 3,000 acres of state land, and 2700 acres of private land in Malheur County, Oregon. The area encompasses approximately 200 miles of river and surrounding canyonlands (of which 186 miles are designated as National Wild and Scenic Rivers). Also within this planning area are portions of five Wilderness Study Areas (WSAs) and the Owyhee Area of Critical Environmental Concern (ACEC). The planning area contains outstandingly remarkable recreational, scenic, geologic, wildlife, and cultural values.

Purpose and Need

The Bureau of Land Management, through the Secretary of the Interior, was directed by the Oregon Omnibus Wild and Scenic Rivers Act to develop management plans for the West Little and North Fork Owyhee Rivers. At the same time the BLM, Vale District determined it was necessary to amend the Owyhee Wild River Management Plan developed in 1986 for the main stem in order to incorporate the acquisition of the Birch Creek and Morrison Ranches into the Owyhee Wild River management strategy, to solve issues that had developed since the original plan, and to provide a coordinated management approach for the Owyhee Wild River System. Since these three rivers (Main, West Little and North Fork Owyhee) are all federally designated wild rivers within the National Wild and Scenic Rivers System and managed by the Jordan Resource Area of the Vale District, BLM initiated development of one management plan to direct and guide management of these important rivers.

Conformance with Land Use Planning

The Southern and Northern Malheur Framework Management Plans support the development of this plan as directed by the National Wild and Scenic Rivers Act and the Oregon Scenic Waterways Act. This plan is also in conformance with the Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP) and the Malheur County Land Use Plan. This plan supersedes the existing BLM Owyhee Wild River Plan (1986).

Management Alternatives

This section describes the three management alternatives designed to respond to the issues that were identified. Management alternatives were developed to best meet the intent of the Wild and Scenic Rivers Act while attempting to resolve the issues. Alternative A would provide a balanced approach to protecting and enhancing the outstandingly remarkable values (ORVs) of each river. Alternative B describes the existing management strategy and what would continue as management for these rivers (the No-action alternative as required by NEPA). Alternative C would emphasize the recreation ORV. It maximizes the recreational opportunities within the river corridors while protecting other river resource values.

OWYHEE RIVER SYSTEM MANAGEMENT ALTERNATIVES

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Visual	Manage the scenery within the river corridors as a Visual Resource Management Class I. A visual contrast rating and evaluation will be conducted for all proposed modifications to the landscape on BLM lands. Actions which are not consistent with visual resource management objectives will be modified or rejected.	"Exclude mining and land disturbing actions within the designated river corridor. Ensure through project review and periodic river patrols that no mining or inconsistenct land uses occur within the administrative boundary or withdrawal corridor." (1986 Owyhee plan.) All prospecting, mining operations, and other activities on mining claims within the West Little or North Fork Owyhee Wild Rivers (outside the 1/4 mile withdrawal boundary) "shall be subject to such regulations as the Secretary of the Interior... may prescribe to effectuate the purposes of the Act." 1968 Wild and Scenic Rivers Act, as amended (refer to section 9.(a)).	"Exclude mining and land disturbing actions within the designated river corridor. Ensure through project review and periodic river patrols that no mining or inconsistenct land uses occur within the administrative boundary or withdrawal corridor." (1986 Owyhee plan.) All prospecting, mining operations, and other activities on mining claims within the West Little or North Fork Owyhee Wild Rivers (outside the 1/4 mile withdrawal boundary) "shall be subject to such regulations as the Secretary of the Interior... may prescribe to effectuate the purposes of the Act." 1968 Wild and Scenic Rivers Act, as amended (refer to section 9.(a)).
Mining	Prepare and submit application for mineral withdrawal on 11,300 acres of public land within the Main Owyhee River corridor. Manage mining in the area between the 1/4 mile mineral withdrawal boundary and the administrative boundary of the West Little and North Fork Owyhee Rivers under VRM class I objectives and guidelines.		

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Acquired Properties	Nominate the Historic site to the National Register of Historic Places. Provide repair and scheduled maintenance of Historic Site contributing elements. Rehabilitate the cultivated fields, returning them to a more natural appearing vegetative cover or, as feasible, an historically compatible cover. Water delivery systems (irrigation ditches and /or pipelines) would be maintained to supply water to the (historically irrigated) fields. Pump sites exist on the Birch Creek and Morrison properties to transport water to the fields. As funding is available, and if the historic value of restoring the waterwheel upstream of the Morrison Ranch site warrants, the waterwheel will be repaired to supply water by historic means. If the water rights are no longer needed for management of the Ranches, lease the water right to the State of Oregon as an instream flow for the Wild and Scenic River/State Scenic Waterway. Develop interpretive brochures and install signs providing visitors with information on the cultural and natural values of the area. Use one of the existing buildings, such as the older Birch Creek Ranch house, as a interpretive station to display area artifacts and information for visitors. Provide a camping/parking area including permanent toilet facilities and an adequate boater take-out/put-in facility for non-motorized boat use. Develop partnerships with interested groups and agencies to use the Morrison Ranch site as a research station, environmental education site, science camp, etc. Explore the feasibility of public rental of the Morrison Ranch site. If partnerships are not found and if funding is inadequate to operate the facility, leasing to a concessionaire for public use may be pursued. Relocate or close a portion of of the Morrison Ranch facility maintenance road (near north end) where it impacts habitat of the Ertter's groundsel (*Senecio ertterae*). Extend the interim no shooting zone to include the area of the old dump site up river from the Birch Creek field Prepare a resource site plan for detailed, site specific actions.	Maintain upper site (known as Birch Creek) for general public use, i.e., boater takeout, camping, fishing, hiking; maintain Morrison site for BLM meetings, workshops, and research facility. Continue to maintain lower alfalfa field and water rights.	Maintain lower field in alfalfa and let upper field revegetate naturally without irrigating. Water right would be lost for that property. Several options were developed under this alternative: 1. Remove all structures at Birch Creek (an agreement between BLM, the State Historic Preservation Office and the Advisory Council on Historic Preservation is mandatory) and maintain as primitive boater takeout site with no improvements/facilities. 2. Lease the Birch Creek and Morrison properties to a concessioner for management. 3. Maintain both sites (Birch Creek and Morrison) for public use. Develop upper site for high general public use area. Establish cabins at lower site as a fee site for public use. Provide a museum with living history programs. Develop a self guided trail.

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Acquired Properties (Cont.)	Inventory and evaluate The-Hole-In-The-Ground property to determine eligibility for inclusion to the National Register of Historic Places (NRHP). If any structures qualify, manage them within appropriate cultural resource laws and the objectives of this plan. Remove all structures, i.e., fences, buildings, etc that do not qualify. Rehabilitate the cultivated fields. Maintain the water right by supplying water to the appropriate lands to re-establish native vegetation. If the water right is no longer needed, lease it to the State of Oregon for an instream flow. Inventory camping areas and other recreation uses. (Refer to EA # OR-030-92-44.)		
Cultural	Complete the inventory and evaluation of all three river corridors, focusing on present day recreation campsites, livestock use areas, and significant sites such as rock shelters and petroglyphs. Monitor and photograph sites giving priority to the focus areas mentioned above. Where practical, stabilize sites that are adversely affected by natural forces and human and livestock impacts. Excavate sites such as dug and looted rock shelters, stratified sites with bank erosion, and deflated/eroded surface sites to retrieve the remaining scientific data. Provide visitors with information and interpretation designed to minimize visitor impacts and to encourage appreciation of cultual resources. Provide for aggressive cooperative law enforcement for the protection of cultural resources.	Maintain current direction recommended in 1986 plan for the Main Owyhee Wild River. "Develop a cultural resources plan to inventory evauate, and protect historic and archaeological sites. As a result of the data collected, conduct cultural resource surveys on specified sites to develop programs for the preservation and interpretation of cultural resources. Nominate suitable sites or areas for listing in the National Register of Historic Places" (1986 Owyhee River plan).	"Develop a cultural resources plan to inventory evauate, and protect historic and archaeological sites. As a result of the data collected, conduct cultural resource surveys on specified sites to develop programs for the preservation and interpretation of cultural resources. Nominate suitable sites or areas for listing in the National Register of Historic Places" (1986 Owyhee River plan).

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Fish & Wildlife	Inventory the three river corridors to determine if such species as Redband trout exist. Coordinate with ODFW. Take actions necessary to protect special status fish. Complete an inventory of the three river corridors within 5 years of raptor distribution, abundance and number of nesting sites and songbird species distribution and abundance. Record occurrence, location, and behavior of nesting Canada geese and goose broods during river patrols. Quantify any disturbance to goose nests and broods. Determine actions necessary to manage the use causing the impacts or mitigate the impacts if they are significant. Coordinate with ODFW on California bighorn sheep populations within the river corridors. If impacts to sheep habitat are identified, actions may be taken to mitigate the impacts.	"Monitor bighorn sheep and waterfowl populations to detect changes in species numbers and habitat use. Adjust recreation carrying capacities, manage use and initiate visitor education programs as necessary to allow for the expansion of bighorn sheep and the maintenance of waterfowl populations" (1986 Owyhee River Plan). BLM would continue to work with ODFW as necessary.	"Monitor bighorn sheep and waterfowl populations to detect changes in species numbers and habitat use. Adjust recreation carrying capacities, manage use and initiate visitor education programs as necessary to allow for the expansion of bighorn sheep and the maintenance of waterfowl populations" (1986 Owyhee River Plan). BLM would continue to work with ODFW as necessary.

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Livestock Grazing and Gathering and Trailing of Livestock	Inventory the river corridors to determine riparian areas and potentials. Within the corridors, a maximum of 40% utilization would be allowed for key grass species in upland areas with the exception of the following winter allotments/pastures (Moreum, Willow Springs and Red Butte pastures of Quartz Mountain, Island Field pasure of Birch Creek, and Black Rocks pasture of Three Fingers) which will remain at 50% utilization. Willow use within the corridors would be limited to a maximum of 30% of the current years leaders on semi-wet and wet meadow riparian sites. Herbaceous vegetation would be managed to ensure a proper functioning riparian system. Management may include seasonal restrictions, stubble height restrictions where necessary, and exclusion fencing. The average minimum stubble height of six inches would be maintained on herbaceous riparian vegetation, on semi-wet and wet meadow sites. Water gaps would be managed so that vegetative cover does not decrease and, if possible, increases as a result of management practices such as developing alternate water, fencing, and herding. Management practices such as fencing, livestock barriers, herding, or elimination of livestock use at the Ryegrass water gap may be taken to ensure livestock/recreational conflicts are reduced at the adjacent hot springs and campsite. These levels would be monitored annually and may be revised. Grazing use during drought years would be adjusted to maintain a balance between authorized livestock use, available forage and water. Livestock use within the river corridors would not be allowed to increase during periods of drought or at other times when forage and/or livestock water, in other parts of the allotment, are in short supply. Provide public information that identifies water gaps and trail crossings, explains the grazing that normally occurs in the area, and what actions are being taken	"Work cooperatively with livestock operators to control livestock in the canyons and reduce grazing impacts on bottomlands and riparian areas. This would be done only in those instances where it is advantageous to the management of livestock, beneficial to resource objectives, and does not conflict withe existing laws and regulations" (1986 Owyhee River plan). Current authorized livestock management would continue. Livestock would continue to use all three of the river corridors for water, forage, gathering, and trailing where accessible.	Remove livestock from river canyon completely through fencing, water developments and/or grazing systems. Increase use supervision. Establish appropriate project maintenance and monitoring requirements.

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Livestock (Cont.)	to protect the areas ORVs. Make the information available in brochures, packets, and at registration sites. Adjust seasons of use, utilization levels, and/or grazing levles, where necessary, to meet the objectives of this plan. Utilize the interdisciplinary allotment evaluation process in considering management alternatives to minimuze conflict, protect and enhance ORVs, and ensure consultation, coordination and cooperation with affected parties. Authorized trailing within the river corridors would occur within one day (12 hour period) for each group or herd of livestock. No overnight stops, holding, or gathering, on public land within the corridors, would be allowed unless prior authorization is given by the BLM. Trailing at Three Forks would normally have one overnight stop in the spring and three overnight stops in the fall per herd. Where possible and compatible with existing mangement policy and direction, develop livestock holding facilities, outside of the river corridors, for gathering and trailing livestock (particularly in the Three Forks and Sand Springs areas). Alternate water sources and trailing areas would be pursued in the ongoing coordination effort with affected parties. Were it is possible to meet the livestock grazing demand (grazing preference) with regard to forage and water, outside of the river corridors, livestock use within the river corridors may be restricted or eliminated.	Maintain current management of trailing of livestock through river canyons. No documented management coordination with Oregon Division of State Lands for trailing at Three Forks exists.	Eliminate trailing of livestock throughout the designated river corridors.
Wild Horse Management	If, through monitoring, it is determined that wild horses are neagatively impacting ORVs, appropriate actions would be taken to eliminate or minimize the impact, to allow for the accomplishment of plan objectives. Actions may include, but are not limited to, gathering to reduce numbers or developing alternate water sources.		

OWYHEE RIVER SYSTEM MANAGEMENT ALTERNATIVES

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Three Forks Cabin and Corrals	Authorize the Three Forks cabin and corral for continued use by the affected permittee(s).	The Three Forks cabin and corral area is used for trailing and gathering. The cabin is used by recreationists for emergency shelter.	Maintain the Three Forks Cabin for public use only.
Water Quantity	Use the State of Oregon Agencies' flow assessments and instream water rights (currently in application stage with OWRD) for the Main, West Little, and North Fork Owyhee Wild Rivers as baseline for the protection of ORVs. Monitor the effectiveness of these flows in protecting the ORVs. If monitoring indicates that these flows are not adequate, and the State of Oregon determines that additional flows are unneccessary, the BLM would initiate action to establish additional instream flows under a Federal Reserved Water Right.	"Construct no new water impoundments on the Owyhee or its tributaries within the administrative boundary as mandated by the Wild and Scenic Rivers Act. Coordinate this action with the Northwest Power Planning Council. Install staff water guages at the boater put-in points that are easily readable." (1986 Owyhee plan.) BLM would follow ODFW's and ODPR's lead on instream flow recommendations for the Owyhee Wild River System. ODFW and ODRP have applied for instream water rights on the North Fork Owyhee River and the upper and lower sections of the Main Owyhee River for the protection and enhancement of fisheries and recreation and aesthetic benefits. BLM would not apply for water rights on any of the Owyhee Rivers in Oregon.	Immediately exercise a Federal Reserved Water Right on each of the three river segments. A Federal Reserved Water Right is authorized by the Act; the priority dates for each of the river segments are the dates of designation.
Water Quality	Establish baseline and cause-and-effect water quality monitoring stations from May through October associated with identified recreational and livestock access and use areas where appropriate. Evaluate data yearly and implement recommendations from site evaluations to alter or limit use at these sites until standards and criteria are met and maintained. Develop instream and stream side projects where needed to aid natural stream flow characteristics and dynamics associated with water resources, recreational use sites, and riparian habitat. Cooperate with and identify water quality infractions to those state and federal agencies that permit discharges and regulate water quality levels affected by land management and owner actions.	"Manage the area to maintain or improve water quality in accordance with State and Federal water quality standards" (1986 Owyhee plan). Continue with current management direction which includes inventorying areas within the Owyhee system that may need water quality monitoring. No specific BLM water quality management plan/system for the Owyhee exists.	No increased emphasis would be established on water quality management. Manage the area to maintain or improve water quality in accordance with State and Federal water quality standards). Continue with current management direction which includes inventorying areas within the Owyhee system that may need water quality monitoring.

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Recreation Use Level	Continue to manage visitor use through mandatory registration of all boaters, river patrols, use control period, boater group size, and unrestricted launches per day. If monitoring indicates that ORVs are being impacted or resource and social condition standards are reaching unacceptable levels, the number of launches per day established in the 1986 plan would become mandatory. This will require establishing a permit system for all boaters which includes dividing the number of launches per day between commercial and noncommercial groups. Public participation will be sought in determining the number of launches per day between noncommercial and commercial boaters. Management actions involving visitor contact and information, and resource protection will be implemented and monitored prior to initiating a permit system. If monitoring indicates, additional limits on launches per day or groups size may be implemented. The visitor use requirements are described in the no action alternative to the right. Coordination efforts between the three BLM districts with jurisdiction over the Owyhee Rivers (Vale, Boise, and Elko) would continue as established in the 1986 plan. The existing Cooperative Management Agreement would be reviewed and updated every five years.	"The Vale District of the Bureau of Land Management will administer noncommercial and commercial boating use from the Oregon-Idaho boundary to the Owyhee Reservoir. The adjoining BLM districts will coordinate issuing special recreation use permits to outfitters that provide services across district boundaries. Only one permit will be required from companies operating in one or more BLM districts. Through an agreement between the Vale and Boise districts, the Vale district will administer commercial permits on the Owyhee River. Commercial operators must have the appropriate state licenses before obtaining a BLM permit. A permit system for private boaters will not be initiated until monitoring indicates such action is needed to control use and/or protect resource values. A boater registration system was started in 1983, and will be continued to gather use data and provide the basis for a river information and education program. The control period on the main stem....will normally be from April 1 to June 30. Flexibility will be used to change the control period as river flows and visitor use indicate. One start per day on the main stem and one start per day on the South Fork will be allowed on the upper Owyhee. Four starts per day will be allowed on the middle Owyhee and six starts per day will be allowed on the lower Owyhee. Maximum group size will be 15 persons [for the upper and middle Owyhee] and 20 persons [for the lower Owyhee] for commercial and noncommercial parties, including boatmen and support personnel on commercial trips.	Set recreation use limits now through professional judgement and documented use levels and impacts and allow for change when limits are not adequate. Reduce party size to 9 people and reduce starts per day to 2 (for commercial and non-commercial) on the middle segment of the Owyhee River (Three Forks to Rome).

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Recreation Use Level (cont.)		Establish environmental, social and physical monitoring studies to determine impacts of human use on the river resource. Monitoring will include: periodic river patrols by raft or kayak, continuation of the campsite photo-point study..., a mandatory river registration program..., a mandatory...use permit for commercial users..., optional...trip survey forms..., completion of post-use questionnaires by commercial permittees, establishment of wildlife studies during...heavy recreational river use, conducting inventories of threatened and endangered plants, and cultural resources. A visitor use allocation system will be established when social, physical or environmental use levels approach carrying capacity." (The above is quoted and paraphrazed from the 1986 Owyhee plan.)	
Recreation developments such as springs, water caches, trails	Strive to provide existing exceptional primitive type recreation opportunities by not developing springs, installing water caches or signs, or constructing trail systems within areas characterized by an unmodified natural environment unless necessary to protect or enhance ORVs. Complete campsite and rim access inventories for all three river corridors. Increase information on primitive type non-motorized trail use opportunities by developing brochures that include existing pack trails, wildlife trails, or cross-country travel routes/areas. Perform river and trail patrols and provide scheduled maintenance of campsites and trails reaching the moderate standard. Discourage use at campsites and trails at the moderate standard. Rehabilitate campsites or trails at the heavy standard and close them temporarily or permanently, depending on resource condition.	"Develop only minimum recreation facilities necessary for resource protection and primitive recreation management, such as an administrative complex at the Rome launch site (outside the river administrative boundary) and vault toilets proposed at Three Forks (within the wild river corridor). Continue maintenance of river campsites and existing structures at the Rome launch site." (1986 Owyhee Plan.)	Provide water caches during river float season. Develop springs for better potable water source. Standard testing of water quality would occur. Develop (construct) a hiking trail within the canyon (where feasible) and along rim (when necessary to avoid steep, talus slopes, sensitive resources, etc.).

OWYHEE RIVER SYSTEM MANAGEMENT ALTERNATIVES

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Anderson Crossing	Install a bulletin at Anderson Crossing on the West Little Owyhee River to provide information and promote appropriate user ethics. If necessary, install signs and/or barriers to contain motor vehicle use to the road and install permanent fire-rings to contain camping use and reduce impacts. Patrol, monitor, and maintain the site.	Continue patrols and maintenance of the site including trash pick-up approximately four times during field season.	Develop a primitive recreation site at Anderson Crossing to include toilet facility, garbage cans, and information bulletin board.
Three Forks	Develop a semi-primitive type camping area at Three Forks including installation of permanent toilet facilities to better concentrate camping use and reduce sanitation impacts. Increase on-site information to include interpretation and protection of natural and cultural resources, vehicle use areas and restrictions, and low impact camping techniques. Patrol, monitor, and maintain the site. If necessary to protect resources, install signs and/or barriers to control unauthorized motor vehicle use.	"Develop only minimum recreation facilities necessary for resource protection and primitive recreation management, such as an administrative complex at the Rome launch site (outside the river administrative boundary) and vault toilets proposed at Three Forks (within the wild river corridor). Continue maintenance of river campsites and existing sructures at the Rome launch site." (1986 Owyhee Plan.) Provide chemical toilet each season (spring through fall) at Three Forks. Maintain bulletin board to provide general recreation information. Maintain patrols and site clean-up efforts.	Construct a developed recreation site at Three Forks (similar to Idaho BLM's campground on the North Fork). Increase patrols, visitor contacts, and trash clean-up efforts.
Rome Launch Site	Improve the Rome Launch site in order to enhance management and visitor service of the Owyhee River System. Develop a permanent visitor and ranger station at the Rome launch site. Maintain toilet facilities, picnic table and fire-rings. Develop a small campground by reconstructing existing camping and picnic areas along river at launch site. Increase visitor service through increased education and interpretation. Work with the State Highway Department to determine an appropriate site (other than Rome) for a highway rest stop between Burns Junction and Jordan Valley. ODT has the lead responsibility for providing such a facility and BLM would work with them as staffing and funding allow.	"Develop only minimum recreation facilities necessary for resource protection and primitive recreation management, such as an administrative complex at the Rome launch site (outside the river administrative boundary) and vault toilets proposed at Three Forks (within the wild river corridor). Continue maintenance of river campsites and existing sructures at the Rome launch site." (1986 Owyhee Plan.) Maintain the Rome trailer facility for seasonal use as office, visitor contact station, and housing for river program staff. Maintain year-round picnic and toilet facilities. Allow camping to continue along parking/picnic area. Maintain and manage BLM facilities at Rome as currently exists: launch site, not highway rest stop.	Same as alternative A except no reconstruction for camping area and develop a CMA with Oregon Department of Transportation (ODT) for cooperative management of a Rome rest stop and work with ODT on for safer access at the highway junction.

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Launching without Registering	Work with local landowners to encourage boaters to register at Three Forks or Rome, or with the Boise or Elko Districts for the upper section. Work with commercial outfitters and whitewater groups prior to each float season to stress the importance of registration requirements. Develop supplementary rules for mandatory registration enforcement authority. Work with the Boise and Elko Districts to install registration boxes at put-ins and to provide the Vale District with registration information annually.	Continue to require float boater registration at designated put-in or take-out sites. Maintain current Rome launch site location.	Initiate exchange to acquire land just south of Crooked Creek (on willing seller basis only) for new launch site location. If exchange is completed, move existing facilities at Rome to new site.
Safety and Visitor Education and Service	Provide more visitor information on potential campsites, rapids, use ethics, boater safety, trails, and protection of cultural and wildlife values. This can be accomplished through videos and brochures. Provide for staff contacts with visitors at Rome during control period. Develop signing, interpretive talk(s), and brochure(s) to promote education of natural, cultural, scenic, and recreation values, boater safety, river ethics, and land owner rights along the river. BLM will work with outfitters, private recreationists and groups, and other agencies to schedule workshops (like the Partners Afloat/Partners Astride Program) to improve users' knowledge on river topics and techniques, and to discuss outfitter, noncommercial, BLM, and other affected parties concerns. Work with Oregon, Idaho and Nevada sheriffs (with Owyhee River area jurisdiction) and the Boise and Elko BLM Districts on search and rescue operations.	Maintain existing situation. No mandatory check in. Continue to coordinate with Malheur, Owyhee and Elko County Sheriffs. (River rangers check for firepans and look at life vests and equipment as much as possible, and provide information on safety. River rangers have no law enforcement authority.) Maintain existing situation: Jordan Resource Area (JRA) of the Vale District Office employs 1 River Manager/Ranger and 2 seasonal River Rangers. River patrols require at least 2 rangers. Other duties include patrols, management and maintenance of other areas such as Three Forks, Birch Creek, and the North Fork and West Little Owyhee Rivers. Also, JRA administers the commercial recreation permits on the Owyhee River in Nevada, Idaho and Oregon.	Require mandatory check in for all boaters for safety equipment, etc. Develop BLM supplementary rules for enforcement authority. Continue with current river staffing, patrols, and education efforts.

OWYHEE RIVER SYSTEM MANAGEMENT ALTERNATIVES

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Motorized Watercraft	Prohibit all motorized watercraft use on the Owyhee River System (Main, West Little and North Fork Owyhee Rivers). Make permanent the current situation of no motorized watercraft use on the West Little and North Fork Owyhee Rivers. BLM would request OSMB to develop and implement regulations prohibiting all motorized watercraft use on the Owyhee River System. BLM would develop supplementary rules for BLM enforcement authority.	"Allow no upstream motorized boat travel on the main stem....to the Oregon-Idaho stateline within the wild river corridor. Request the Oregon State Marine Board to restrict motorized craft above 10 HP from the Oregon-Idaho stateline to the Owyhee Reservoir within the wild river corridor." (1986 Owyhee Plan.) As of 1988, the Oregon State Marine Board implemented regulations for the Main Owyhee River. Those regulations included the 10 HP action, but restricted upstream motor boat use to the section from reservoir to Moreum Dam. No motorized boat use exists on the West Little Owyhee or the North Fork Owyhee Rivers. BLM would develop supplementary rules for enforcement of these actions.	Prohibit all motor boat use except allow 10 horsepower or less motor boat use, downstream use only, on the Main Owyhee River below Birch Creek. Develop supplementary rules for BLM enforcement authority.
Aircraft Use	Prohibit aircraft landings on federal lands within the river corridors (including the formerly private airstrips at the Morrison and The-Hole-In-The-Ground sites). Exceptions to this regulation may be authorized for emergency operations and for management purposes. BLM would develop supplementary rules for BLM enforcement authority. Close and rehabilitate the formerly private land airstrips. Rehabilitate any unauthorized airstrips on public lands within the river corridors such as the one at Deary Pasture and the one downstream of the Morrison property. Rehabilitation may include reseeding with native vegetation. Improve clarification of aircraft use restrictions within the river corridors through this management plan, the boating guide, news releases, and other information sources as necessary.	Maintain current management direction. Fixed-wing aircraft are classified as off-road vehicles when landing off of existing roads, ways or developed, designated air strips. The existing Owyhee River Management plan restricted motorized vehicle use within the river corridor to designated roads. Therefore, landing of fixed-wing aircraft is prohibited within the administrative boundary of the Owyhee National Wild River, except on designated roads and airstrips. Also, motorized vehicle use is restricted to existing roads and ways within all Wilderness Study Areas (main Owyhee and West Little Owyhee are WSAs). Oregon State statutes restrict landing of aircraft on public roads. Maintain no public use of airstrip at Morrison (Pinnacles) Ranch. "The use of helicopters by commercial or noncommercial boating parties for purposes of shuttling equipment, supplies and people would be prohibited. Helicopters and motorboats may be authorized during search and rescue and other emergency operations and for wildlife management purposes. Existing airfields can continue to be used." (1986 Owyhee plan.)	No aircraft landings allowed on federal lands within the wild river corridors except for emergency situations and on the airstrip at the Morrison site for visitor use.

OWYHEE RIVER SYSTEM MANAGEMENT ALTERNATIVES

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
Vehicle Access	Work cooperatively with Malheur County to provide safe public vehicle access into Birch Creek Ranch and ensure protection of natural and cultural resources. BLM would work with the county and Bureau of Reclamation to close the road on the west side of the river, north of the Morrison place approximately 2 miles before it crosses the river and enters the Morrison site. Designate primary river corridor access roads to Three Forks, Rome Launch Site, Birch Creek, Leslie Gulch, and Anderson Crossing (Star Valley Road), and secondary river corridor access roads to The-Hole-In-The-Ground and Griffith Ranch (Red Butte Road) as open to public access. No new access roads would be developed. The vehicle way from Bogus Creek to the river would be closed to vehicle access. Provide a scheduled routine road maintenance program for primary corridor access roads, and on an as needed basis for secondary corridor access roads.	Manage Birch Creek access as primitive 4-wheel drive roads, infrequently maintained. No physical closure of Morrison Road, but discourage access through the river. Keep designated motorized vehicle access points for the main Owyhee as Three Forks, Rome launch site, Leslie Gulch, Birch Creek, Bogus Creek, Hole-in-the-Ground, and Black Rocks. (Where roads traverse private land, landowner permission is required.) Physical maintenance is mixed between county and BLM.	Upgrade Birch Creek Road to 2-wheel drive, dual lane vehicle access. Close route north of Morrison site with fence and gate. Close Bogus Creek Road. Initiate easement acquisitions for The-Hole-in-the-Ground and Black Rocks roads to provide public access to the Owyhee River. Maintain Three Forks, Rome launch site, Leslie Gulch, and Birch Creek as Owyhee River vehicle access points.
State Land	Develop a Cooperative Management Agreement (CMA) with the Division of State Lands to cooperatively manage those lands under its authority within the wild river corridors to protect the outstandingly remarkable values. Maintain existing MOU with Oregon State Parks and Recreation Department to effectively manage the Owyhee State Scenic Waterway. Include representatives from affected state agencies on river patrols.	"Where applicable, coordinate the visitor and resource management program with...State of Oregon Division of State Lands." (1986 Owyhee Plan.) Maintain existing Memorandum of Understanding (MOU) between BLM in Oregon, the Oregon State Parks and Recreation Department to work together to manage those rivers or river segments that are both Federal Wild and Scenic Rivers and State Scenic Waterways. BLM would work with Oregon Division of State Lands to resolve conflicts and issues within the wild river corridors.	Maintain existing Memorandum of Understanding (MOU) between BLM in Oregon, the Oregon State Parks and Recreation Department to work together to manage those rivers or river segments that are both Federal Wild and Scenic Rivers and State Scenic Waterways. BLM would work with Oregon Division of State Lands to resolve conflicts and issues within the wild river corridors.
Other Federal Lands	Initiate revocation of the Bureau of Reclamation (BR) withdrawals within the river corridor. Request jurisdictional transfer of BR acquired lands within the river corridor to BLM ownership. Develop a CMA between BLM and BR to allow BLM management jurisdiction over BR withdrawn and acquired lands until revocation and transfer occurs.	"Revoke all Reclamation withdrawals along the river corridor and return public lands to total BLM management." (1986 Owyhee Plan.)	Develop a CMA between BLM and BR establishing BLM management for all federal lands within wild river corridors.

OWYHEE RIVER SYSTEM MANAGEMENT ALTERNATIVES

Planning Issues	Alternative A - Balanced Protection of ORVs	Alternative B - No Action	Alternative C - Emphasize Recreation ORV
	Initiate revocation of Federal Power Site withdrawals within the Owyhee River System.	Maintain existing management situation on Federal Power Site Withdrawals within the wild river corridors. A cooperative management agreement allows BLM to provide limited management direction on the withdrawn lands with the concurrence of the Federal Energy and Regulatory Commission.	Develop a CMA between BLM and FPC establishing BLM as land manager over all federal lands within river corridors.
Land Acqusition Exchange Easement	Negotiate to acquire priority lands important to resource protection on a willing buyer/willing seller basis. On a willing seller/willing buyer basis, BLM will acquire (fee title, scenic easements, and exchanges) priority lands important to resource protection within the Owyhee Wild River System (see Appendix F for the acquisition list). If developed properties are acquired, BLM will manage them consistent with this plan and the mandates of the Wild and Scenic Rivers Act. As feasible and consistent with law and BLM policy, future land acquisitions within the designated river corridors will be managed to retain or be returned to a wild river environment. Pursue state land exchanges for protection and enhancement of ORVs.	"Seek to obtain private and state land to protect the natural and cultural values of the canyons. Explore acquisition of private and state land from willing owners through land exchange, purchase or gift. Acquire scenic easements to prevent incompatible use or development of private land when acquisition (fee title) is not possible. Negotiate recreational access easements across private property where necessary to allow public access to the river corridor." (1986 Owyhee Plan.) No acquisition strategy would be established for the North Fork and West Little Owyhee rivers; acquisitions would occur as issues or conflicts arise.	Do not acquire any more private lands along river corridors. OR Acquire all parcels or obtain scenic or access easements on a willing seller basis.
Boundaries	Set administrative boundaries for the West Little and North Fork Owyhee Rivers as shown on Maps 1A through 4B in Appendix J and as described in Appendix I. Maintain existing Owyhee River administrative boundaries which were developed by an Ad-hoc group for the 1986 Owyhee Wild River Plan.	Interim administrative boundaries for the West Little and North Fork Owyhee Wild Rivers would be made permanent through the mandate of the Wild and Scenic Rivers Act. The Main Owyhee River administrative boundaries, developed by the 1986 Owyhee plan Ad-Hoc group, would remain the same.	Establish West Little and North Fork Owyhee River administrative boundaries to reduce the amount of private and state lands within the designated corridors. Exclude currently proposed side drainages that are state or privately owned.

Affected Environment

Introduction

This section describes the environment of the Main, West Little and North Fork Owyhee Rivers in Oregon. It provides an overview on location, size, land ownership, and navigability for each of the three rivers. The section then describes the natural and cultural resources of each river. Finally, it describes the resource activities and land uses occurring within the river corridors. The description of the affected environment provides a basis from which to assess the effects of the various management alternatives described in the previous section.

Overview

Location, Size and Ownership

Owyhee — The 120 miles of the Owyhee River included in the National Wild and Scenic River System (NWSRS) are located in Malheur County in southeast Oregon. The river flows northerly from the Oregon-Idaho border to Three-Forks (26 miles), Three-Forks to China Gulch (39 miles) and Crooked Creek to the Owyhee Reservoir (55 miles). The Rome Launch Site, which is outside the designated river corridor, is included in this planning effort because iot is an integral part of the management of this river system.

The land area within one-quarter mile of the mean high water line on each side of the river totals 38,400 acres. Public ownership includes 35,240 acres (92%), 1,670 acres (4%) are owned by the State of Oregon and 1,490 acres (4%) are privately owned.

West Little — The 57.6 miles of the West Little Owyhee River included in the NWSRS are located approximately 30-55 miles south-southwest of Jordan Valley, Oregon, Malheur County and include the river from its headwaters to its confluence with the Owyhee River.

Of the land included in the 57.6 miles of designated river corridor, 12,520 acres (99.5%) are in public ownership administered by the BLM, and 54 acres (0.5%) are privately owned. These acreages are based upon interim boundaries, pending finalization through the development of this river management plan.

North Fork — The 9.6 miles of the North Fork Owyhee River included in the NWSRS are located 28 miles southeast from Jordan Valley, Oregon, Malheur County and include that segment of the river from the Oregon-Idaho border to the boundary of the NW&S Owyhee River at Three Forks.

Of the 9.6 miles of designated river, 1,247 acres (42%) are in public ownership administered by the Bureau of Land Management, 1,126 acres (37%) are State of Oregon administered lands and 620 acres (21%) are privately owned. These acreage figures are based upon interim boundaries, pending finalization through the development of this river management plan.

Navigability

State ownership to the beds of navigable waterbodies was granted to Oregon in 1859 as an incidence of statehood and is an inherent attribute of state sovereignty protected by the U. S. Constitution. Currently, both the state and federal government, and in some cases private land owners, claim ownership of the river's bed and bank. While long term resolution of this issue is not the subject of this river plan, future management implications are obvious. Therefore, while there may be disagreement on ownership, it is vitally important that there be agreement on the management philosophy for the Owyhee, West Little Owyhee and North Fork Owyhee Rivers.

Under state law, the Division of State Lands (DSL) is responsible for the management of the beds and banks of navigable waterbodies (ORS 274.005-274.590). DSL is the administrative arm of the State Land Board (the Board) composed of the Governor, Secretary of State, and State Treasurer. Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund. These assets include the beds and banks of Oregon's navigable waterways and are to be managed for the greatest benefit of the people of this state, consistent with the conservation of this resource under sound techniques of land management. Also of paramount importance is the protection of the public trust values of navigation, fisheries, and public recreation.

The original federal test for determining navigability was established in The Daniel Ball case over 100 years ago. This U. S. Supreme Court case clarified that rivers "are navigable in fact when they are used, or susceptible of being used, in their ordinary condition, as highways of commerce..." Interpreting this requirement, subsequent court decisions have ruled that a waterbody is navigable if it is capable of use as a public highway for transporting goods or for travel. The Federal court determination for navigability has not been made for the Owyhee, West Little Owyhee or North Fork Owyhee Rivers.

Within state owned waterways, any activities or land uses such as new utility or transportation corridors and boat ramps or similar facilities that impose into or cross a navigable waterway below ordinary high water will require an easement from the State Land Board. Existing facilities will require an easement at such time as they undergo major structural alternation, replacement, or relocation. In addition, removal of sand and gravel requires a royalty lease and any use that occupies any area of submerged or submersible land requires a waterway lease.

DSL has determined that there is sufficient evidence to support a claim of navigability and, therefore, state ownership of the beds and banks of the Owyhee River System as follows:

1. Owyhee River (mainstem): From the Oregon/Idaho state line (RM 186.5) to Owyhee Reservoir (RM 69).

2. West Little Owyhee: No current or historical use of the river is recorded; no study has been completed by the State for this stream reach. Further investigation is needed in order to substantiate a claim.

3. North Fork Owyhee: From the Oregon/Idaho state line (RM 9) to Three Forks (RM 0).

The position of the BLM is that navigability is a judicial finding and must be made by a Federal court. Most Oregon rivers have not been determined to be navigable or nonnavigable. The BLM considers rivers nonnavigable until proven otherwise. However, a trial may not be required if the evidence is persuasive and all partners agree. Nonetheless, the final position of the BLM must be based on consultation with appropriate legal counsel (Department of Justice) and the proper filing of court stipulations. For those rivers found nonnavigable, the BLM manages the bed and banks for the people of the United States.

As with any jointly managed resource, jurisdiction is not as important as care for the resource. The BLM and DSL will continue to work together to assure that the public trust interest and the purpose of the Wild and Scenic River's Act are met.

Resources

Vegetation

The National Wild and Scenic Owyhee River System lies within the landform/vegetation classification known as the Intermountain Sagebrush Province/Sagebrush steppe Ecosystem (Bailey-Kuchler, 1966).

Owyhee — Periodic high flows limit soil development and establishment of riparian vegetation within the steep and narrow portions of the canyon. The riparian areas of the canyons may be comprised mostly of grasses, sedges, rushes, and willows depending on the potential of the site. Species of juniper and hackberry can also be found within the canyon.

Adjacent uplands are within the cold desert steppe province. Various species of sagebrush and associated bunchgrasses predominate. The most common plant community is the Wyoming big sagebrush *Artemisia tridentata wyomingensis* - bluebunch wheatgrass *Agropyron spicatum*. Pure stands of Idaho fescue and bluebunch wheatgrass often occupy the canyons' steep slopes, with Idaho fescue being more abundant in sheltered, moist habitats.

Occasional volcanic ash deposits, such as those at Chalk Basin near the confluence of Bogus Creek, afford unique habitats where endemic plant species have evolved. Several of these plants are being studied (Category II status) for possible listing as Federally Threatened or Endangered status. Eight plant species located in the Owyhee Canyonlands are classified as sensitive, Federal Category II, or "Watch List." These species are:

1. Weak milk-vetch (*Astragalus solitarius*) — On Oregon's Sensitive List and a Federal Category II species (more information is necessary before final classification).

2. Sterile milk-vetch (*Astragalus sterilis*) — On Oregon's Sensitive List and a Federal Category II species.
3. Owyhee River Stickseed (*Hackelia ophiobia*) — On Oregon and BLM "Watch List."

4. Anderson's Buttercup (*Ranunculus andersonii*) — On Oregon and BLM "Watch List"; little known of its local distribution.

5. Packard's sagebrush (*Artemisia packardiae*) — A BLM sensitive species due to limited distribution.

6. Cusick's Chaenactis (*Chaenactis cusickii*) — A BLM sensitive species.

7. Idaho Cryptantha (*Cryptantha propria*) — A BLM sensitive species.

8. Naked-stemmed Phacelia (*Phacelia gymnoclada*) — A BLM sensitive species.

Ertter's groundsel (*Senecio ertterae*), a Candidate 1 plant species being considered for listing, was found in 1992 in two separate locations on the Birch Creek Historic Ranch. Since this species was thought to be globally restricted to Leslie Gulch, approximately eleven air miles northeast of Birch Creek, these new locations are a considerable and significant range extension for the species. The plant is an annual, who's primary growth in August and September, a highly unlikely time to grow for most annuals found on arid lands.

Limited botanical surveys have been conducted in the river canyon. These recent discoveries demonstrate that far more rare plants may be found in the river corridor than are currently known or suspected. Unusual soil types within the corridor no doubt give rise to suitable habitat for such species.

West Little — Extremely narrow canyons provide shading from desert sun. The West Little Owyhee canyon is exceptional in this respect due to nearly 40 miles of very narrow and deep canyon. Several species of plants are endemic to the mesic shaded canyon walls, such as Packard's sagebrush, *Artemisia packardii*.

Riparian areas are comprised of grasses, sedges, rushes and willows depending on the potential of the site. Associated uplands are often dominated by low sagebrush, Artemisia arbuscula, an important habitat for wildlife.

Professional judgement is that the canyon floor and walls hold vegetation that is virtually pristine. The isolated pockets of vegetation found there have been free from human impact, and thus may be examples of relic plant communities. Although no inventories have been performed, it is the botanist's judgement that the eight sensitive-type species listed above also may be found within the West Little Owyhee River canyon.

North Fork — Extensive stands of western juniper, *Juniperus occidentalis*, typify the North Fork of the Owyhee. Juniper is not common along the Owyhee River. The North Fork and isolated areas along the main Owyhee are the only significant juniper stands within Oregon's portion of the river system. Junipers provide tree-form structure that is valuable wildlife habitat. Mule deer use juniper for thermal cover in both winter and summer. Several bird species are dependent upon juniper berries for winter forage, notably the Townsend's solitaire and robin.

Several cottonwood trees were located along Squaw Creek within the river corridor in the summer of 1992. Other vegetation includes bunchgrasses, sagebrush, wetland grasses, and willows. Only limited botanical inventories have been performed.

Fish

Owyhee — before development of the Owyhee Dam, salmon migrated from the Pacific Ocean upstream through the Columbia-Snake Systems into the Owyhee River. Construction of the Owyhee Dam and other dams downstream on the Snake River blocked these migrations. Hatchery coho salmon were stocked in Owyhee Reservoir, but the stocking effort was not successful.

Squawfish, chiselmouth, shiners, dace, and bridgelip and coarsescale suckers are native to the river. Native redband trout, a Category II candidate for protection under the Endangered Species Act, also may exist. Work is underway to determine if pure strain redbands still exist in this river. The ODFW has successfully introduced channel catfish, smallmouth bass and other spiny ray fish. Efforts to introduce rainbow trout have been only marginally successful.

If the presence of the Category II Redband trout is confirmed, the fisheries resource of the Owyhee may be outstandingly remarkable.

West Little — In 1979, a stream survey by BLM reported speckled dace, redside shiners, and bridgelip suckers as common. The river contains remanent populations of stocked trout and smallmouth bass are found near the mouth. Redband trout also inhabit the West Little Owyhee, but the redband gene pool may have been diluted by past hatchery-rainbow stocking. Hatchery stocking has ceased in the Owyhee River System. Work is underway to determine if pure strain redbands still exist in this river. Whatever the outcome of this study, the resident trout in this river are reproducing naturally in the wild and thus are considered wild stocks.

If the presence of wild stocks of redband trout is confirmed, the fisheries resource of the West Little Owyhee may be outstandingly remarkable.

North Fork — Surveys performed by the Oregon Department of Fish and Wildlife from 1964-1966 reported nine species of fish: Speckled dace, redside shiner, bridgelip sucker, chiselmouth, longnose dace, sculpins, northern squawfish, largescale sucker, and hybrid rainbow/redband trout. Recently, observers have noted the presence of smallmouth bass.

The redband gene pool has been diluted by past hatchery-rainbow stocking, but such stocking has ceased in the Owyhee River System. The resident fish in this river are reproducing naturally and thus are considered wild stocks, but pure strains are probably not present. However, with improvements in habitat conditions and subsequent increases in fish populations and size, the North Fork may have the potential for outstandingly remarkable fisheries values.

Wildlife

Owyhee — The wildlife resource of the Owyhee River is an outstandingly remarkable value. (Reference the outstandingly remarkable value section in Chapter One.

West Little — Values noted for the Owyhee River Canyon are also present for the West Little Owyhee River and its spectacular canyon. Raptor habitat is especially favorable and raptor abundance is truly outstanding. Waterfowl are less abundant due to the narrow canyon and seasonal lack of water. However fish-eating birds such as merganser and cormorant, take advantage of abundant fish when low water occurs during the summer and autumn. (Reference the ORV section in Chapter One.)

North Fork — The wildlife resource of the North Fork Canyon is an outstandingly remarkable value. The canyon provides upland and riparian habitat for a significant number and diversity of wildlife species. Deep canyon habitats such as the Owyhee System are significant to wildlife in desert and semi-desert environments, particularly when the area supports a large diversity of vegetation including thermal cover. Wildlife species including mule deer, pronghorn antelope, cougar, bobcat, beaver, river otter, muskrat, other small ground mammals, reptiles, a host of small birds, bats, and a large population of raptors inhabit the canyon. (Reference the ORV section in Chapter One.)

Cultural

Prehistoric

Owyhee — The best information on cultural resources relates to the lower segment of the Owyhee River between the Rome Launch Site and the start of the Owyhee Reservoir. A formal cultural resource inventory was conducted by the BLM in 1976. Approximately 100 sites were recorded and half of them were considered significant. Types of sites include campsites, petroglyph sites, lithic scatters, rock shelters, quarries, and "Early Man sites." Stratified campsites, petroglyph sites, rock shelters, and Early man sites are particularly important to the prehistory of the region, and some of these are likely to have national significance.

The 1976 inventory report indicated the following condition of the resource: that erosion was the most destructive force affecting canyon sites at this time; livestock grazing had affected sites, notably at spring sites, where cattle often gather in large concentrations; water erosion was a very serious problem; most stratified sites are adjacent to the river and were especially susceptible to the force of erosion; amateur depradations were responsible for much site destruction; and areas accessed by 4-wheel drive vehicles were being more badly potted than areas reachable only by boat.

A re-inventory of the lower segment and a partial initial inventory of the middle and upper segments was performed in 1993. The inventory focused primarily on prehistoric sites that are also modern day recreation campsites. The re-inventory found nine of the modern day campsites on the lower section have significant cultural sites on or near them. The re-inventory also found that 14 of the camps on the lower section have no cultural resources on or near them and another 14 camps have cultural sites near them. Out of the 11 modern day camps inventoried on the middle section, two camps have cultural sites on or near them and the other nine have no cultural resources on or near them. Five modern day camps were inventoried on the upper section and none have prehistoric cultural resources.

Despite continuing site degradation, Outstandingly remarkable cultural sites with research and public education values remain on the lower segment of the Owyhee. For example, The-Hole-In-The-Ground Petroglyph Site is probably the outstanding site of its kind in eastern Oregon, and can be investigated by archeologists and enjoyed by river users. The rock shelters, both pristine and looted, can provide invaluable data on prehistoric lifeways. Some campsites may have

stratified buried cultural materials, and can provide the excavator with a chronology of prehistoric occupation. Refer to the narrative of the Main Owyhee prehistoric cultural outstandingly remarkable value in Chapter One.

West Little — No cultural resource inventory has been completed for the West Little Owyhee River corridor. There are indications that the area was utilized. Some intensively used prehistoric campsites, including numerous caves and shelters along the canyon, have been located in the area. Two petroglyph sites have been located, one of which was associated with hunting blinds. Significance of the sites in particular and of the area in general has yet to be determined. Field work to inventory and record sites has not been scheduled and no interest has been expressed by non-BLM researchers. In the interim, known and discovered sites are addressed under existing statutes, regulations, and policy.

Although no cultural resource inventory has been completed for the West Little Owyhee River, professional judgment is that based on similarities in topography and known site preferences of Native Americans, this canyon has a high potential for prehistoric cultural values. Furthermore, due to the extreme remoteness, lack of development and access to the area, any existing sites may have a higher probability of being undisturbed and therefore more valuable for scientific research. If prehistoric cultural sites exist, a determination must be made as to whether sites are of outstandingly remarkable value, i.e. sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human interest value(s). Due to the lack of documentation, no determination of significance or ORV is made pending further assessment.

North Fork — No cultural resource inventory has been completed for the North Fork Owyhee River corridor. Prehistoric artifacts have been identified within the river corridor; evidence that the area was utilized. Its regional or national significance has yet to be determined. In the interim, known and discovered sites are addressed under existing statutes, regulations and policy. Although no cultural resource inventory has been completed for the North Fork Owyhee River, professional judgment is that based on similarities in topography and known site preferences of Native Americans, this canyon has a high potential for prehistoric cultural values. Furthermore, due to the extreme remoteness, lack of development and access to the area, any existing sites may have a higher probability of being undisturbed and therefore more valuable for scientific research. If prehistoric cultural sites exist, a determination must be made as to whether sites are of outstandingly remarkable value, i.e. sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human interest value(s). Due to the lack of documentation, no determination of significance or ORV is made pending further assessment.

Historic

Owyhee — The Owyhee River was a significant contributor to the Euro-American settlement and development of the area. Wagon and military roads through the area include the Fort McDermitt to Jordan Valley Road, the Oregon Central Military Road, and the Chico, California to Silver City, Idaho Road, all of which used the Owyhee Crossing near Rome; and the Fort McDermitt to Silver City Road that crossed the Owyhee at Three Forks. Traces of these road grades can be seen on the hills and canyon walls adjacent to the crossings. Most roads date to the Civil War, or shortly thereafter, and relate to the southwest Idaho gold fields, or to military actions against Native Americans.

Birch Creek and Morrison Ranches, generally called "Birch Creek", are historic ranches managed by BLM. They are eligible for inclusion on the National Register of Historic Places, based on their uniqu historic rural landscapes and their Basque ethnic associations.

Trails or crossings within the rugged Owyhee Wild River System have been used by ranchers since the turn of the century and may be considered an integral part of the development of ranching in southeast Oregon. In at least one instance a single family has used the same crossing for eighty years. Modern day trailing is consistent with historical practices. Livestock are moved by people on horseback, giving the operation an "Old West" aspect.

The remains of homestead and ranching operations, military roads and stage lines are found throughout the river canyon. Nothing of substance is known about the historic sites along the upper reaches of the river. Above Three Forks, the Owyhee River becomes steeper, wilder, and more remote. USGS topographic maps show several abandoned structures that may have been built by hunters, trappers and/or prospectors. In the interim, known and discovered sites are protected under existing statutes, regulations and policy.

The 1976 inventory of the lower section indicated that: "careful consideration should be given to reconstruction of all historical structures located within the canyon. Such sites have a tremendous recreational value and are one of the most popular attractions to float boaters. Only one of the structure sites is in poor condition now, but rapid deterioration of other such sites can be expected."
No reconstruction work has been done on historic sites on BLM land. Natural deterioration is the major threat to historical properties. Human impacts have also occurred, and include graffiti on stone structures, collection of historic artifacts, and removing wood structural elements from buildings. The major impact from livestock is caused by leaning on and scratching against walls, causing them to collapse. Although minimal work was performed on historic sites during the 1993 inventory, one historic site on the lower section was noted and mapped. The inventory also noted erosion impacts (cutbank/soil loss) threatening the stability of a cabin on the upper section.

Please refer to the narrative of the Main Owyhee historic cultural outstandingly remarkable value in Chapter One.

West Little — The West Little Owyhee has not been systematically inventoried to determine the existence of historic cultural resources. The majority of the land in this area was surveyed by the General Land Office in 1881, with the remainder surveyed in 1904 and 1918. The survey noted a wagon road, a corral, houses, and rock foundations.

Since the main Owyhee River contributed significantly to the settlement and development of the area, it is very likely that the West Little Owyhee area also contains historic insight to the settlement of this region. Professional judgement is that few sites are located in this area, but due to the extreme remoteness and inaccessibility of the area, any existing sites may be undisturbed and therefore of greater value to science.

North Fork — The North Fork Owyhee has not been systematically inventoried to determine the existence of historic cultural resources. The Three Forks area provides some insight to the area's cultural history with the Fort McDermitt to Silver City Road crossing, an old log cabin, and remnants of a mid-19th century army fort. At least one military wagon road, several civilian pioneer wagon roads, and remains of cabins, a still, and rock fences are also located in the North Fork area.

Professional judgement is that few sites are located in this area, but due to the extreme remoteness and inaccessibility of the area, any existing sites may be undisturbed and therefore of greater value to science.

Geology

Owyhee — The Owyhee River cut a canyon 500 to 1,100 feet deep into the high plateau of the Owyhee Uplands in southeast Oregon. The plateau is of volcanic origin and averages 5,000 feet in elevation. It is flat to gently rolling, with the greatest topographic variations occurring north of the Owyhee River. The river has cut the basaltic and rhyolitic rocks of the plateau into tightly meandering, U-shaped canyons, with alternating vertical walls and steep talus slopes. Refer to the description of the outstandingly remarkable geologic resource of the Owyhee River in the previous section.

West Little — The West Little Owyhee River originates in a broad, hilly upland characterized by

tuffaceous sedimentary rocks believed to be the result of lake or flood plain deposits. The river then descends through a steeply-walled canyon whose width varies from one to two thousand feet to as little as eight feet. The walls expose 500 vertical feet of welded tuffs and tuffaceous sediments partly capped with thin basalt subsequently uplifted as the river cut its canyon. Thus, a journey down the canyon leads from the most recent to the oldest strata and the region's volcanic history can be observed. Modern geologic forces of weathering and erosion are apparent, and the wind and water carved rocks that contribute so much to the area's beauty also serve to demonstrate the forces that have created the canyon.

The geologic features of the West Little Owyhee are not unique to the region, but are unique to Oregon. They serve to demonstrate the geologic history of the Owyhee Basin better than other sub-drainages in the watershed. When considered in the context of the entire watershed, the geologic resource of this river is an integral part of the whole and is considered a significant resource value within the geographic region.

North Fork — Geologic formations of the North Fork Owyhee River are predominantly of volcanic origin. At the point where it enters Oregon, the river flows about two miles through a steeply-walled canyon some 500 feet deep. Middle reaches of the river flow through a more open canyon that gradually opens to over 1 1/2 miles in width and 1200 feet in depth. The lower two miles of the canyon feature a sinuous, tightly constricted bottom, some 200-400 feet deep. Refer to the description of this river canyon as a potentially outstandingly remarkable geologic resource in the previous section.

Soil

The most recent and comprehensive soils information for the three wild and scenic river corridors is a 1969 Level IV soil survey report by the Oregon State Water Resources Board. This survey maps twelve "classification units" in five groups within the river corridors. Those units are:

LEVEL TO SLOPING SOILS OF OLDER FANS AND TERRACES

1. Classification Unit 56: clayey, shallow, with hardpan.

UPLAND SOILS OVER SOFT SEDIMENTS

2. Classification Unit 60: Loamy and moderately deep.

DARKER SOILS OF HIGHER ELEVATIONS

3. Classification Unit 83: Loamy and moderately deep.
4. Classification Unit 83: Loamy-clayey, very stony, shallow.
5. Classification Unit 84: Loamy, rocky, very shallow.

LIGHT COLORED SOILS OVER HARD BEDROCK

6. Classification Unit 76: Clayey, very stony, shallow
7. Classification Unit S76: Clayey, extremely stony, shallow.
8. Classification Unit 76L: Clayey, somewhat stony, shallow
9. Classification Unit 77: Loamy, rocky, very shallow.

MISCELLANEOUS LAND UNITS

10. Classification Unit 96: Steep rock land.
11. Classification Unit 98: Soft, raw sediments, steep.
12. Classification Unit 99: Bare lava flows.

The predominant soils of the three rivers are as follows:

Owyhee — Soils of the Owyhee River are predominantly in specific slope groups of units 76 and 96. Unit 76 soils are shallow, clayey, very stony, well drained over basalt, rhyolite, or welded

tuff, occurring on gently undulating to rolling lava plateaus and some very steep faulted and dissected terrain. This predominant soil type contains about 30 percent rock land, and has 20 to 60 percent and steeper slopes. Unit 96 soils are shallow, very stony soils interspersed with rock outcroppings over rough, steeply sloping areas. This predominant soil type is predominantly rock land with 20 to 60-plus percent slopes.

West Little — Soils of the West Little Owyhee River predominantly fall within unit 77. Unit 77 soils are shallow, very stony or rocky, well drained soils on undulating or rolling plateaus underlain by basalt, rhyolite, or welded tuff. This unit 77 soil type contains about 30 percent steep rock land with 12 to 20 percent slopes. The steep rock land occurs as canyons and fault scarps.

North Fork — Soils of the North Fork Owyhee River fall within the same slope group and unit 76 classification as the Owyhee River, described above.

Air

Air quality within the three river corridors is very high. Except for intermittent local disturbances such as wildfires, dust-raising activities or traffic, few sources of potential pollutants are present in the area. Some pollutants from more urbanized or agricultural areas to the north may occasionally affect the area from time to time, but their influence, if present at all, is considered negligible. Significant responsibility is placed on the federal land manager for protection of air quality and related values including visibility.

Water

Resource

The Owyhee basin drains approximately 11,337 square miles from its headwaters in Nevada to its confluence with the Snake River at river mile 392.2 south of Ontario, Oregon. The drainage system is characterized by steep river valley sideslopes, a series of perennial to intermittent tributary systems, and narrow steeply incised side canyons that empty directly into the main channel. The mainstem of the Owyhee River within Oregon is enjoined by its major tributaries the North and Middle Forks, the West Little Owyhee River, and Antelope, Soldier, Jordan, and Crooked Creeks.

Surface runoff in this perennially flowing river is mostly from winter snowpack accumulations in the high mountainous areas. The average annual precipitation is approximately 8 inches along the mainstem in Oregon, and 7 to 33 inches over the entire basin. Due to the aridity of the basin, snowpack in the higher elevations varies from year to year, influencing both the amount and duration of spring runoff. The U. S. Geological Survey's gaging station, located near Rome, Oregon, records streamflow from about 8,000 square miles of drainage. This station's period-of-record data of forty-one years (1949-1990) indicate that average annual discharge is 995 cubic feet/second (720,900 acre-feet/year). Maximum discharge was 50,000 cubic feet/second on March 18, 1993, and minimum flow was 42 cubic feet/second on August 12, 1954.

Owyhee — The mainstem of the Owyhee River flows 154.5 miles from the Idaho/Oregon border to the backwater of the Owyhee Dam. The stream channel falls approximately 1420 feet, from 4090 feet mean sea level (msl) at the border to 2670 feet msl at the dam. The average drop is approximately 13 feet per mile. In many reaches, the main river channel bottom is confined and flows directly on bedrock, however some areas are quite broad, with irrigated hay meadows in the floodplain. Management of streamflow consists of impoundment of waters by the Owyhee Dam for irrigation, flood control, an power production. Numerous small off-channel reservoirs impound waters for irrigation and livestock throughout the basin. Ownership and management of the reservoirs are scattered among several private, public, and federal entities.

West Little — The mainstem of the West Little Owyhee River is approximately 57 stream miles in length. From the headwater (6,670 feet msl) the river falls 2,650 feet to its confluence with the main Owyhee River (4,020 feet msl). The average drop is approximately 47 feet per mile. The river's main tributary, Toppin Creek, is about 35 stream miles in length and falls 1,910 feet over its course. Elevation ranges from 6,060 feet msl in the headwaters to 4,150 feet msl at the confluence with the West Little. The stream gradient of Toppin Creek over its last five mile is extremely steep and falls an average of 160 feet per mile, more than three percent in this reach. Although flow data do not exist for either of these watersheds, the mainstem of West Little drains an area approximately 125,050 acres (195.4 sq. mi.), and the Toppin Creek drainage contributes 72,240 acres (112.9 sq. mi.) to the entire West Little Owyhee River watershed of 197,290 acres (308.3 sq. mi.).

North Fork — The mainstem of the North Fork Owyhee River is approximately 30 stream miles in length. From the headwaters (6,770 feet msl) the river falls 2,810 feet to its confluence with the Middle Fork (3,960 feet msl). The average drop is approximately 67 feet per mile on the designated section. The mainstem then continues an additional one-half stream mile downstream until it joins the main channel of the Owyhee River. Although historical long-term flow data do not exist for this watershed, the mainstem of the North Fork Owyhee River drains an area approximately 141,500 acres (221.1 sq.mi.) with an additional 68,750 acres (107.4 sq. mi.) contributed from the Middle Fork before flowing into the Owyhee River.

Quality

Historical long-term, site-specific water quality data are quite sparse for the entire Owyhee River Drainage. Existing data suggest runoff waters contain a few hundred milligrams per liter (mg/l) total dissolved solids (TDS) and pH within the 7.0-9.0 range. During 1988, the Oregon Department of Environmental Quality identified and rated the entire Owyhee River Drainage system in Oregon as containing stream segments having moderate to severe water quality impacts affecting the desired use of these waters. These findings were published in the Oregon Statewide Assessment of Nonpoint Sources of Water Pollution Report. The report identified many reaches as having nonpoint source problems impacting water quality, fisheries, aquatic habitat, and water contact recreation (Table 3). The report also identified many of these reaches as having nonpoint source problems with turbidity, low dissolved oxygen, nutrient loading, sediment, streambank structure, and low flow volumes affecting aquatic biota.

Causes of beneficial use degradation by nonpoint pollution was cited as vegetation removal (also removes thermal cover over streams), surface erosion, and changes in streamflow pattern and timing. The land use most commonly cited in connection with these problems was livestock grazing, while other probable causes were irrigated agriculture, recreation, and mining. In Oregon, the BLM is a cooperating agency with the State of Oregon on this assessment and has made commitments to improve nonpoint source conditions impacting stream segments, and to implement Best Management Practices on public land. The Bureau is currently in the process of developing an interested multiple agency (state and federal) water quality and quantity monitoring plan for the Owyhee River System.

The Oregon Department of Environmental Quality (DEQ) has divided the state's surface waters into 19 sub-basins and developed point and nonpoint source water quality standards for each basin. Some selected water quality criteria for the Owyhee River Basin are displayed below.

1) Ph: 7.0 - 9.0

2) Water Temp: No measurable increase above background if temperature is 68 degrees F. or greater.

3) Dissolved Oxygen: Not less than 75% saturation at season low; not less than 95% saturation in spawning areas.

Table 3. Nonpoint Source Stream Segments and Impacts*

Segment Name	Segment Number	Water Quality	Fisheries	Aquatic Habitat	Water Contact Recreation
Owyhee River	231	M/O	M/O	M/O	-
Owyhee River	232	M/O	M/O	M/O	-
W.L. Owyhee River	233	M/O	M/O	M/O	-
Jordan Creek	241	S/O	S/O	S/O	M/O
Jordan Creek	242	S/O	S/O	S/O	M/O
Mahogany Creek	274	M/O	M/O	M/O	-
Fish Creek	275	M/O	M/O	M/O	-
N.F. Owyhee River	276	M/O	M/O	M/O	-
M.F. Owyhee River	277	S/O	S/O	S/O	-
Rattle Snake Creek	280	M/O	M/O	M/O	-
Upper Cow Lake	317	M/O		-	M/O
Antelope Reservoir	318	M/D	**	-	M/D

M=Moderate, S=Severe, D=With Data, O=By Observation
* Nonpoint Assessment Report located in Vale District Office.
** Impacts to Fisheries were not identified in 1988 at this location. Since then elevated mercury levels in fish were detected and angling is prohibited in Antelope Reservoir until further notice.

4) Turbidity: No more than 10% increase over natural.

5) Fecal Coliform: Mean of 200 per 100ml in a 30 day period, 10% samples not exceeding 400 per 100ml.

Water Rights and Instream Flows

In the State of Oregon, all water is publicly owned and laws pertaining to surface and ground water usage are based on the principle of Prior Appropriation. That is, the first person to obtain a water right will be the most senior holder on a particular stream and has priority over all junior claims in times of water shortage. Permits for water use from any source must be obtained from the Oregon Water Resources Department, although exceptions do exist and are recognized and specified by the State.

The State of Oregon recognizes instream water rights, for the public benefit, to maintain sufficient flows to protect recreation, fish, and wildlife and other river related resources. Instream water rights are applied by and through the State of Oregon's Department of Environmental Quality, the Department of Parks and Recreation, or Oregon Department of Fish and Wildlife to the State's Water Resources Department. The priority date for instream water rights is the date the application is submitted to OWRD.

The Owyhee River State Scenic Waterways Act creates a State obligation to review new consumptive uses against the needs of recreation, fish and wildlife. The Oregon Supreme Court held in *Diak versus City of Portland and Oregon State Water Resources Commission* that Oregon Scenic Waterway statutes protect instream flows from water diversions that may degrade Oregon Scenic Waterway values. This interpretation means new permits for the use of water will not be granted within or above a scenic waterway if the proposed use adversely affects flows necessary to maintain these values. Because of this decision, the State has been accepting requests for water use in the Owyhee Drainage system but not issuing permits until results of a study to determine the flows necessary to protect Oregon Scenic values are available.

OWRD recently completed the study and has determined minimum flows needed to support recreation, fish and wildlife in the Owyhee Scenic Waterway. Instream flows needed to preserve the existing range of recreational, fish and wildlife uses have been identified based on information from user guides, agency reports and expert opinions. The Water Resources Commission approved use of these flows which will assist them in making findings on pending applications and future water rights. Refer to Tables 5 and 6 for OWRD's flow data and approved instream flows for the Owyhee River.

Current BLM policy is to use the State's instream flow water right process to preserve the flow-dependent values for which the river was designated. The Wild and Scenic Rivers Act (PL 90-542) specifically reserved the minimum quantity of water necessary to fulfill the purpose(s) for which the river was designated. A Federal Reserved water right for the Owyhee River would have a priority date of October 19, 1984, the date of designation; the priority date for the West Little Owyhee and the North Fork of the Owyhee would be October 28, 1988. A Federal Reserved water right would only be exercised if the State's appropriative instream water rights process is inadequate to protect the designated values of the river.

Owyhee — ODPR has applied for instream water rights on the Main Owyhee from the Idaho stateline to Three Forks and from Crooked Creek to Birch Creek. The application requests optimal flows for each of the respective reaches within Oregon for the maintenance, reproduction and growth of various fish species, and for recreation and aesthetic benefits (Table 6).

West Little — No instream water rights application has been made for this section. Flow assessments by OWRD will be used by the BLM as baseline flow levels to protect ORVs (Table 6).

North Fork — An instream flow application has been filed by ODFW for the entire length of the North Fork Owyhee River from the state line to the confluence with the Owyhee River. ODFW requests optimum flow for the maintenance, reproduction, and growth of redband trout, and recreation and aesthetic benefits of the stream (Table 6).

Table 4. **Instream** Flow **Requirements** Determined By **ODFW**

River	To	Flow Requirements (cubic feet/sec.)											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lower Owyhee	Head of Owyhee Reservoir RM 75.0	130	130	130	150	150	150	130	130	130	130	130	130
Middle Owyhee	USGS Gage 13181000 RM 121.2	95	95	100	120	120	120	100	100	100	95	95	95
Upper Owyhee	Above Tudor Warm Springs RM 163.5	45	45	50	65	65	65	65	65	50	45	45	45
North Fork Owyhee	Upstream at RM 1.0	7	7	10	15	15	15	15	15	10	7	7	7
Middle Fork Owyhee	Upstream at RM 0.25	4	4	6	8	8	8	6	6	6	4	4	4
West Little Owyhee	Confluence with Owyhee RM 0.0	20	20	20	30	30	5	5	5	5	20	20	20

RM = River mile

Table 5. Flow-dependent Uses and Values- Owyhee River*

Use	Flow Range (cfs)	Season of Use	Intensity of Use
Angling	-	Spring - Summer	moderate
Drift Boat	1,200 - 8,000	February - June 15	low
Canoe	60+	June 15 - October	low
Kayak	1,000 - 8,000	March - June 15	low
Raft	1,000 - 8,000	March - June 15	high
Fish & Wildlife	-	All year -	

Table 6. Flow Data for the Owyhee Scenic Waterway - Mean Monthly Flow (cfs) measured near Rome (gage #13181000)*

	Minimum Flow	Maximum Flow	Average Flow	Flow for Fishery	Recreation Flow Range	Approved Scenic Waterway Flows
January	113	4,461	394	95	-	95
February	129	8,820	834	95	-	95
March	232	9,404	1,665	100	1,000-8,000	1,200
April	205	16,958	2,241	120	1,000-8,000	1,200
May	124	10,467	1,475	120	1,000-8,000	1,200
June	61	4,870	653	120	1,000-8,000/60	1,200/120
July	61	1,034	229	100	60	100
August	63	451	145	100	60	100
September	62	360	134	100	60	100
October	85	442	152	95	60	95
November	107	592	195	95	-	95
December	103	2,898	258	95	-	95

*These two tables present the results of the study on Owyhee Scenic Waterway flow assessments performed by Oregon Water Resources Department in 1992.

Resource Activities and Land Uses

Livestock Grazing

Livestock have been grazing in the area since the middle 1800's. The first grazing licenses were issued in 1936. Planning units are manageable units within a grazing district for grazing administration, and the middle of the Owyhee River and some of its tributaries serve as boundaries. Carrying capacities were established by adjudication in the 1950's and 60's for each planning unit. Grazing allotment boundaries were set during and after adjudication (see Maps 3A, 3B, 3C, 4A, 4B). Following adjudication of the Soldier Creek Planning Unit, allotment boundary agreements (between permittees and BLM) changed the boundary of Arock, Raburn, Willow Creek and Whitehorse Allotments to the Owyhee Canyon rim. The remainder of the affected allotments still have the middle of the Owyhee river as their boundary.

The Owyhee river corridor was inventoried during the 1950's and 60's as part of the adjudication process. Sixty percent of the river corridor was classified as waste land (71). The 71 classification was assigned to those areas of the river where the canyon is narrow and very rocky, with little to no potential for vegetation. The stretch from Three Forks to Rome, with a few exceptions, is a good example of 71 lands. Forty percent of the river corridor was assigned a carrying capacity rating using acres and AUMs. These areas were the wider, more open portions of the canyon represented by The-Hole-in-the-Ground and Deary Pasture. The AUMs in the river

corridor were separated from the federal range AUMs. The original adjudication plats list the river AUMs as "under the rim" or as "PWR lands" (meaning Power Site Withdrawal lands under the Bureau of Reclamation). Due to these lands being Power Site Withdrawal lands and to the limited access, the river AUMs were apparently not part of the planning unit AUMs that were adjudicated to grazing permittees. The AUMs have been historically allocated to wildlife.

In 1983, following another inventory of the rangelands, the Southern Malheur Environmental Impact Statement (EIS) analyzed various alternatives regarding grazing management. The preferred alternative of the EIS was adopted in the Range Program Summary and Record of Decision (RPS) in January 1984. The 1983 Grazing Environmental Impact Statement and the 1984 Rangeland Program Summary provided direction for livestock grazing on BLM lands throughout the Owyhee canyon lands. Management direction included riparian improvement objectives for bottomlands of the Owyhee system and livestock exclusion areas.

The preferred alternative regarded the streamside riparian habitat within the river corridor from Three Forks to Owyhee reservoir as unalloted or inaccessible to livestock. It did not mention the upland forage within the canyon. The preferred alternative directed that "livestock would be excluded from the Owyhee River where alternate sources of water could be provided above the rim." This direction has caused problems in areas where providing water above the rim would be impractical or very expensive. Developed water sources exist above the rim in some areas, but most dry-up or freeze depending on the season. The Owyhee River system is used as a water source for many allotments and it may be the only water source during drought. Providing water above the rim has been a range improvement emphasis in the Vale District since the early 50s.

Trailing occurs through several areas of the Owyhee system. The main areas are: Birch Creek, The Hole-in-the-Ground, Bogus Creek, Bull Creek, Rye Grass Creek, Sand Springs, Fletcher Trails, Three Forks, Five Bar, and Spring Creek Crossing. Trailing of livestock normally takes one day or less through the canyon except for the Three Forks crossing. When water is not available outside the canyon, within a days trailing period, the livestock would use the river as a water source, for one day or more and then move out of the canyon.

Thirtysix percent of the designated river system has received some degree of livestock use. This grazing use ranges from heavy use near water gaps to very slight use where cattle have wandered up and down the canyons from access points. Ten percent of the designated river system has identified livestock concerns, with less than five percent being at water gaps or trail crossings.

The area between the Main stem and the North Fork Owyhee Rivers, known as Brown's Ridge and Middle Fork areas (refer to map 3C) is a mostly State of Oregon land, with a small amount of private and public land mixed in. The Oregon Division of State Lands (DSL) manages the state lands for such things as livestock grazing. Presently, two ranchers lease these lands around and within the Owyhee Wild River System from DSL. The season of use for livestock operations is usually spring through fall. Historically, trailing through Three Forks has been the only feasible access to these lands.

Livestock Issues and Concerns

Livestock use of the river corridor is limited due to the rugged topography of the area. However, where there is livestock access to the river conflicts may occur. Most concerns regarding livestock use relate to impacts to scenic, recreation watershed, water quality and riparian values. Most of the riparian concerns exist along the more open and less rugged stretches of the river corridor such as portions the upper West Little Owyhee River. Few areas within the river corridor, have potential for long term riparian improvement. Much of the Main Owyhee does not have much riparian potential because the canyon is narrow and rocky, and normal spring runoffs scour the loose soil in the riparian zones. Watershed concerns exist where major trails or routes to the river become heavily used, exposing soil to erosion during spring runoff and summer thunderstorms. Water quality concerns are increasing in all watersheds including the Owyhee River. Soil erosion, and urine and feces impacts to water quality are a concern in areas where

heavy livestock use is occurring within the river corridor. Scenic values are a major concern since they are outstanding remarkable values designated by congress. Cattle use of the river corridor will be noticeable no matter how light the use may be. Problems occur when cattle use affects the river corridor's scenic value to the extent that the Owyhee River is not providing the visitor the positive experience congress intended when designating the area Wild and Scenic.

Issues and Concerns by Allotment

Within the Malheur Resource Area, the following allotments have been identified as having livestock grazing concerns or issues within the Main Owyhee River corridor:

Quartz Mountain allotment (0406) The area of concern is Greely Bar and the associated warm springs. Greely Bar and the warm springs are popular areas for river floaters and are frequently used by livestock. Livestock use is impacting the scenic value for this area as a camp and recreational site.

Birch Creek allotment (0506) includes the Birch Creek and Morrison Ranch properties. Concern over use conflicts are high and will be monitored. The allotment was rested the past two years. The use along Birch Creek will be very early spring use and short duration, for protection of riparian vegetation. Livestock use north of the Morrison facility (Island Field pasture) will occur in winter. Trailing may occur from Island Field to Birch Creek through the Morrison and Birch Creek properties.

Within the Jordan Resource Area the following allotments have been identified as having livestock grazing concerns or issues within the river corridor:

Bogus Creek Allotment (10904) has two major livestock trails. Bull Creek trail (near Potters Cave) and Ryegrass (near the south end of the allotment). Both trails are used when moving between Bogus Creek and Saddle Butte allotments. Trails are used during the winter grazing season of 12/1 to about 3/1. Impacts from the trailing affects scenic and watershed values. Grazing pressure on the river increased during the drought. Several camping areas near Potters Cave are affected by livestock grazing. An existing gap fence in the northern portion of the allotment near Potters Cave is down allowing cattle access to the river.

West Cow Creek Allotment (20902) has three major livestock trails that cross the Owyhee River between Saddle Butte and West Cow Creek allotments. The Navaro, Sand Springs, and Fletcher trails are used during winter/spring between 12/1 to about 3/31. Impacts from the trailing have an affect on scenic and watershed values. There is private land near the Navaro trail and grazing use on public land between the private land and the river has increased.

Saddle Butte Allotment (20805) has five major trails: Bull Creek, Ryegrass, Navaro, Sand Springs and Fletcher. Livestock use of these five trails affects scenic and watershed values. In addition, the use of the Ryegrass trail also affects a nearby campsite and adjacent warm springs that have been very popular with floaters. Sand Springs and Fletcher trails also affect two major camp sites for floaters. These trails also provide access to the river for livestock watering. During the winter use period in this allotment the river is the only permanent water source available for livestock use. During normal or wet years there are depressions and small lake beds that furnish some water for livestock. The demand on the river for livestock water has increased during the drought years.

Jackies Butte Allotment (01101) has two areas, Sand Hollow and Deary Pasture that have livestock grazing concerns. Grazing use in the allotment has been under a deferred rotation system from 4/1 to 10/30. Sand Hollow provides livestock access to the river for water, affecting scenic and watershed values. Deary Pasture is a five mile stretch of the river corridor that has been used several times during dry years since the 1960's. Before the

1960's it was used by horses and cattle every year. Affects of livestock grazing in 1990 and 1992 to scenic and watershed resources have been reported to BLM. No other impacts as a result of grazing the Deary Pasture are known at this time. Demand for livestock use of both areas occur during drought years as water in reservoirs dry up in the allotment. Depending on the year and the pasture rotation, the Sand Hollow and Deary Pasture areas could be used any time during the 4/1 to 10/30 period.

Three Forks Trail is the largest major crossing of the Owyhee River corridor. Demand for use of this crossing is high as other routes require major adjustments in livestock operations. In addition, the area is popular for camping, access for floaters, and for general river corridor use. Impacts to the camping and boater put-in areas from livestock trailing through, being held over in the area for one or more days sometimes affects scenic and watershed values. Trailing use normally occurs during mid to late February, late June and from mid October through November. Unauthorized use from cattle left behind when trailing or coming off fo private or state lands have also impacted the area in the past.

Ambrose Maher Allotment (01102) has grazing use from 2/15 to 5/15 in the spring and fall use from 10/12 to 10/22 in normal years. The river corridor is used for watering and trailing of livestock. The area is a mile up river from Three Forks and cattle trail and graze up and down between the two areas.

Anderson Allotment (01401) has one major trail crossing at Five Bar and grazing use occurs from 3/1 to 6/20. The Five Bar area is mostly private and state land. Grazing use can be heavy on the east side of the river (outside this allotment) during high water years because livestock congregate in this area, not being able to cross the river. Once livestock reach the Anderson Allotment, most of the cattle water at reservoirs up above the rim and not in the river corridor.

Star Valley Community Allotment (01402) has one incidental use area (Anderson Crossing) and another trail crossing at Spring Creek. The grazing use occurs from 3/1 to 9/30 under a deferred rotation system. Anderson Crossing receives recreational use by campers, hunters etc. There is incidental livestock use of Anderson Crossing for a water source during normal years. In normal years some livestock would come to drink and then move back up on the uplands in this area. During the drought, livestock use of Anderson Crossing increased. Spring Creek crossing has no identified concerns.

Louse Canyon Allotment (01307) is grazed from 3/1 to 9/30 under a deferred rotation system. Spring Creek and Anderson Crossing are the major trails in this allotment. Spring Creek has no identified concerns. As mentioned above, Anderson Crossing receives recreational camping use and incidental livestock use for watering. Under drought conditions livestock use of the area had increased and livestock would go up and down the West Little Owyhee River for some distance. Livestock use from the Louse Canyon side is greater than the use from the Star Valley side of the corridor. About 8 miles upstream of Anderson Crossing the river corridor opens up from a narrow canyon into a relatively open area, and stays open to the headwaters. This riparian area is 70 to 80 percent of the potential plant community for the site, has a fractured rock base stabilizing the stream banks and plant community, and has good riparian potential. Grazing occurs from 6/15 to 9/30. Concern has been expressed regarding grazing during hot summer months. Grazing during this period impacts woody plant growth and establishment and does not allow for regrowth of herbaceous vegetation for bank stability during spring runoff.

Campbell Allotment (11306) is grazed from 3/1 to 10/15 under a deferred rotation system. Trail use occurs through the upper most one mile or so of the river corridor. The river corridor (about four miles) is grazed during the hot summer season. Grazing use has been heavy in the past and riparian conditions are not good, as undesirable species (i.e. wyethia) are prevalent with shrubs and riparian vegetation lacking. Head cutting problems are occurring. There is good potential for riparian improvement in this area.

Table 7. Livestock Grazing

Allotment by River	Acres	AUMs	Approx # of Cattle	Season of Use	Grazing System
Owyhee River					
Whitehorse[1,2]	27,945	4,413	1,954	04/08-06/15	Flip flop use of two pastures
Willow Creek[1]	76,114	10,521	2,104	04/01-08/31	Deferred rotation
Rabum	5,685	1,040	220	04/01-12/31	Deferred rotation
Arock[1]	64,286	10,507	2,101	04/01-10/15	Deferred rotation/rest rotation
Ambrose Maher	3,625	580	229	10/15-05/15	Season long
Jackies Butte[1]	220,685	14,734	2,250	04/01-10/30	Deferred rotation
Saddle Butte[1]	190,480	6,426	1,764	11/01-03/31	Winter use
Bogus Creek	4,529	250	174	02/15-03/31	Winter use
Morcum	5,566	220	55	11/01-02/29	Winter use
West Cow Crk[1,3]	139,885	11,900	2,080	04/01-10/31	Deferred rotation
Birch Creek[3]	8,851	1,099	133	04/01-02/28	Various, deferred rotation, winter
Mahogany[1,4]	304,807	29,267	4,200	03/01-02/28	Various, deferred rotation, winter
Three Fingers[5]	127,189	9,981	1,200	12/01-04/01	Deferred rotation, winter
Quartz Mountain	83,326	7,476	825	11/01-04/15	Deferred rotation, winter
Anderson[6]	39,404	2,964	800	03/01-06/20	Deferred rotation
West Little Owyhee River					
Star Valley[1]	189,141	6,901	1,022	03/01-09/30	Deferred rotation
Louse Canyon[1,7]	131,663	11,533	2,197	03/01-09/30	Deferred rotation
Campbell	158,957	14,514	1,900	03/01-10/15	Deferred rotation
North Fork Owyhee River					
Cherry Creek	595	65	25	04/08-06/20	Season long

[1]Denotes Community Allotment
[2]Also affects North Fork Owyhee
[3]Includes Fenced Federal Range
[4]This allotment has been split by decision into 5 allotments, the decision is under appeal, the allotments are begin run as temporary allotments pending appeal. The pasture affected by W&S River is blackrocks (Three Fingers Allotment) 400 C, 12/01-04/01.
[5]Temporary allotment in Mahogany
[6]Also affects West Little Owqyhee
[7]Also affects Main Owyhee

Wild Horses

A portion of the Sand Springs Wild Horse Herd Management Area (HMA) lies within the Owyhee Wild and Scenic River corridor. The river is the east boundary which extends from the confluence of Crooked Creek north approximately eighteen miles. The HMA is on the west side of the river(Map 2A).

According to the Wild Horse and Burro Act of 1971, Public Law 92-195, as amended, the wild and free roaming horses on public lands are protected, managed and controlled by the BLM. Population management levels for the Sand Springs Herd were established by the Southern Malheur Rangeland Program Summary (RPS) dated January, 1984. Minimum and maximum wild horse population levels allocated are 100 and 200, respectively or an appropriate management level (AML) of 150.

An Interior Board of Land Appeals decision of June, 1989 concluded that the AML for a horse population is one in which a thriving natural ecological balance occurs between horses, wildlife, livestock, and vegetation. Excess animals are defined as those that must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area.

Several trail crossings such as Sand Springs, Ryegrass and Bull Creek are used by horses during drought to get to the river for water. The use of these trails by wild horses may impact scenic and watershed values of the river corridor. In normal years, the horses do not prefer to use the river as a water source as it confines them and limits their visibility to potential danger. BLM performs studies in the uplands, at areas such as Sand Springs, to monitor wild horse use and potential impacts.

The population can be expected to increase about 22% annually. To maintain the herd within the established population level, excess horses must be removed. Approximately 100 head are removed once every four years using a helicopter and trap. Trap sites are located outside the NWSR corridor.

Recreation

Setting

The three segments of the Wild and Scenic Owyhee River system provide a primitive type recreation setting. Most of the canyon areas are pristine and remote with few vehicle access points. Types of recreation include whitewater float-boating (except for the West Little Owyhee River), viewing scenery and wildlife, hunting, fishing, camping, day hiking, horseback riding, rockhounding, and nature study. Several sites on the Owyhee and at least one site on each of the West Little and North Fork segments provide vehicle touring destinations. Undeveloped camp sites are numerous while developed camp sites are few. There has been an increased interest in backpacking, particularly in the major tributary canyons such as the North Fork and West Little. The outstandingly remarkable recreation values are described in Chapter One for each river.

As of 1992, BLM identified 138 campsites along the designated river system. These campsites range from very small, accommodating 2 people, to large, accommodating 20 people. The majority of the campsites are within the Main Owyhee River and North Fork corridor. Two known campsites exist on the West Little Owyhee corridor, but it has not been inventoried. High water flows can re-arrange, erase, or add sites. Fiftysix of the 138 campsites have had livestock use ranging from heavy to slight. Twelve of the campsites occur at water gaps and/or trailing points along the corridor. Livestock us at these twelve sites is generally heavy.

The Recreation Opportunity Spectrum (ROS, see Appendix H) is used in BLM planning as an inventory tool for recreation planning and management. The physical recreation setting for the Main, West Little and North Fork Owyhee Rivers is described using the ROS terminology and from the upstream end of the administrative boundary downstream.

Owyhee - From the Idaho/Oregon line to Three Forks is primitive excluding the private lands at Five Bar and the Warm Springs. The Three Forks area is semi-primitive motorized. Downstream of Three Forks are to China Gulch is primitive. From Crooked Creek to Morcum Dam is primitive. From Morcum Dam to the eastern most edge of The-Hole-In-The-Ground property/development is semi-primitive motorized. From this edge to the western most edge of the Birch Creek property/development is primitive. From this Birch Creek edge to the fence at the northern edge of the Morrison property/development is roaded natural. From this fence to the backwater of the Owyhee Reservoir is semi-primitive motorized. Approximate mileage per class is: primitive=109, semi-primitive motorized=9, and roaded natural=2.

West Little - From the upper boundary (near the headwaters) to Anderson Crossing is primitive. The Anderson Crossing is semi-primitive motorized. From the east side of the road to the confluence with the Main Owyhee is primitive. Approximate mileage per class is: primitive=55.75, semi-primitive motorized=1.25.

North Fork - From the Idaho/Oregon line to the bridge is primitive. The bridge area to the confluence with the Main Owyhee (also known as the Three Forks area) is semi-primitive motorized. Approximate mileage per class is: primitive=9.5, semi-primitive motorized=0.5.

Recreation Activity Preference

The Owyhee River corridor, including the North Fork and West Little Owyhee Rivers, provides unsurpassed opportunities for primitive recreation activities. The corridor's remote location, pristine terrain and feeling of solitude allow the visitor to experience wilderness on three of the nation's truly wild rivers. Whitewater boating, both commercial and non-commercial, is by far the most popular recreation endeavor. However, outdoor enthusiasts also visit the area for hunting, fishing, camping, backpacking, photography, viewing wildlife, nature study, site-seeing, rock climbing, horseback riding and rockhounding.

The 1980 National River Recreation Study demonstrates that most visitors float the Owyhee River to run rapids, view scenery and camp. The possibility of several portages and bolder sewn rapids make the medium sized raft the preferred craft followed by kayaks, canoes and drift boats. Approximately 50 percent of the boaters enjoy visiting archaeological and historical sites, and 42 percent appreciate hiking in the canyon and side drainages during their river trip.

Fishing on the Owyhee is usually fair to good. Frequent fluctuations in weather, and water clarity and level may at times produce a poor fishing day. Hunting can be good to excellent for mule deer, bighorn sheep, chukar partridge, and quail.

The North Fork and West Little Owyhee River canyons feature high quality off-trail wilderness backpacking and day-hiking activities. The rugged canyons' beautiful scenery and variety of wildlife provide a perfect setting for photography and nature study. Fishing and swimming in the cold water pools add to the diversity of activities enjoyed within these canyons. The North Fork canyon provides superior hunting opportunities over the West Little due to the abundant wildlife cover and a wider corridor. Horseback riding and rock climbing hold high recreation potential for both canyons. Also, kayakers, catarafters float a 13 mile run down the North Fork during spring run-off. The run starts at North Fork Campground in Idaho and ends at the confluence with the Owyhee at Three Forks.

Seasons and Times of Use

During normal water years, the Owyhee float season can begin as early as February and last until the end of July. However, cold unpredictable weather in February inhibits use, while water levels in July are adequate only for kayaks and canoes. Water flow and season length depend on winter snowpack and runoff rates, which vary from year to year. May and June are the busiest months due to better weather. The most active weekend is consistently Memorial Day.

Floating on the North Fork occurs during the spring runoff, the only time of the year it carries enough water for float boating. The North Fork is recommended for experts only. The BLM has no record of boating on the West Little Owyhee River and does not recommend such a venture due to the dangerous canyon.

Also, the spring is the best time of the year for viewing desert wildflowers and green foliage. Summer and fall are the preferred seasons for backpacking and hiking. Numerous river crossings lead ambitious outdoor enthusiasts to select the seasons of warm weather and low water levels. Moderate angling use occurs throughout spring and summer.

Party Size

The river's characteristics, including difficulty and access, separate boaters onto three river segments. These segments, known as the upper (above Three Forks), middle (Three Forks to Rome) and lower (below Rome), are natural breaks in which to calculate visitor statistics. The average party size for commercial trips during the past 10 years on the upper segment was eight floaters. The middle segment carries about seven participants per group and approximately 11 people comprise a commercial trip on the lower segment. The size of non-commercial groups on

the upper segment was eight, middle segment groups average five, and lower segment group size was six. BLM limits groups size to 15 on the upper and middle segments, and 20 on the lower segment. There are no party size estimates for other recreation activities.

Place of Origin

Most visitors to the Owyhee are from Idaho. Approximately, forty-eight percent of the commercial outfitters and registered non-commercial boaters in 1991 indicated they lived in Idaho. Oregon follows Idaho with forty percent, succeeded by Washington with six, Nevada with three, Utah with two and California with one percent.

The National River Recreation Study of 1980 indicates that approximately 60 percent of the boaters lived in Oregon, 14 percent from Idaho, 12 percent from Washington, seven percent from California and seven percent from other states.

Most backpackers come from Idaho and Oregon. Most anglers and hunters are residents of Oregon, however, some out-of-state big game hunters do visit the canyons in search of trophies.

Visitation Estimates"

BLM began recording visitor use estimates on the Owyhee in 1974. The total number of boaters that first year was 482. 1993 was the highest use year to date with 2,091 registered boaters. Water level and visitation on the Owyhee are directly proportional.

Commercial use on the upper segment, a portion of which flows through Idaho, is regulated by the Idaho Outfitters and Guides Board. This board establishes guidelines for the number of outfitters per river in Idaho. The regulations state that no more than six commercial outfitters will be allowed on the main stem of the Owyhee River from Duck Valley Reservation to the Oregon state line. Therefore, in nearly all cases, no more than six outfitters will be on the Oregon portion of the upper segment, since the most practical river access is above the state line.

The largest non-commercial visitation estimate for the upper segment came in 1983 with about 80 visitors. Commercial visitation reached its highest point in 1989 with 63 guests. Optimum water flow (reading at Rome) for rafts above Three Forks falls between 2,000 and 6,000 cfs.

The highest number of visitors per year on the middle segment came in 19930 with 530 non-commercial and 86 commercial floaters. The preferred water flow (reading at Rome) for rafting this segment is between 1,500 and 3,000 cfs. Non-commercial boaters have more flexibility than commercial groups, allowing them the opportunity to respond to the quick rise and fall period of the Owyhee. Commercial use on the middle segment has been low since 1983.

Noncommercial visitor statistics on the lower segment peaked in 1984 with 1,077 boaters, and in 1980 for commercial guests with 771. Below Rome (reading at Rome) the optimum water level for rafting is between 1,000 and 8,000 cfs. In 1992, the preferred level only appeared on merely 13 days. Approximately, 143 non-commercial and 70 commercial boaters took advantage of the short season.

Fishing use is moderate and usually done in conjunction with backpacking, hunting and late season boat trips. There are no estimates of the amount of hunting, backpacking or day use that occurs within the canyons.

[8]No noncommercial visitor statistics are available for the upper segment in 1990-1991. Low water levels is the main cause for low use and no documented statistics in 1987 and 1988. Low water prevented commercial trips on the middle segment in 1991.

Table 8. 1979 Through 1993 Season Registered Visitation

	79	80	81*	82	83	84	85*	86	89*	90*	91*	93	Total
Upper Segment (Above Three Forks)													
Non-Commercial	24	0	0	40	80	24	16	23	50	-	-	59	316
Commercial	8	16	0	30	23	48	17	47	63	22	37	9	320
Total	32	16	0	70	103	72	33	70	113	22	37	68	636
Middle Segment (Three Forks to Rome)													
Non-Commercial	204	263	23	239	144	85	97	198	164	34	29	471	1951
Commercial	118	219	5	117	127	62	2	35	52	3	0	77	817
Total	322	482	28	356	271	147	99	233	216	37	29	548	2768
Lower Segment (Below Rome)													
Non-Commercial	721	800	50	936	1010	1077	394	704	494	121	143	1097	7547
Commercial	438	771	90	325	592	461	271	556	256	52	70	358	4280
Total	1159	1571	140	1261	1602	1538	665	1260	750	173	213	1455	11787
River Total													
Non-Commercial	949	1063	73	1215	1234	1186	507	925	708	155	172	1627	9814
Commercial	564	1006	95	472	742	571	290	638	371	77	107	444	5377
Total	1513	2069	168	1687	1976	1757	797	1563	1079	232	279	2071	15191

*Below normal water year (amd 1992)
No statistics were collected for the low water years of 1987 and 1988.

Vehicle Access

Owyhee

Upper Section - Access to the 26 miles of the upper section is located in Idaho and Nevada. Access to the East Fork in Idaho is located 12 miles within the Duck Valley Indian Reservation, at Garat Crossing where the El Paso Natural Gas Pipeline crosses the river, or at Crutchers Crossing near the confluence with the South Fork. Access to the South Fork is at the crossing of the El Paso Natural Gas pipeline in Nevada, the YP Ranch in Nevada, or the 45 Ranch in Idaho. Access to the pipeline crossings require four-wheel drive vehicles within the canyons. The put-in points at 45 Ranch, YP Ranch and the Duck Valley Indian Reservation can be reached with a high clearance, two-wheel drive vehicle **with the approval of the private property owners or officials of the reservation.** All principle access routes may be unusable during periods in the spring due to muddy road conditions.

Middle Section - A well maintained dirt road leads south from Highway 95 to the rim at Three Forks, where a rough road passable by high clearance vehicles descends to the river's edge (Refer to map 3C). There is no road access to the river from Three Forks to Rome. The BLM has developed a scenic overlook 15 miles downstream from Three Forks along the Owyhee Canyon's east rim.

Lower Section - A short graveled spur road leads to a developed river access point just south of the Highway 95 bridge crossing at Rome (Map 3B). Facilities at Rome Launch Site include a graded boat ramp, parking area, toilets, and potable water. Overnight camping is allowed and picnic tables and campfire rings are provided. One dirt road below Rome provides primary public vehicle access to the river (Map 3A). Birch Creek road requires the use of high clearance, four-wheel drive vehicles.

The final take-out is Leslie Gulch on the Owyhee Reservoir (Map 3A). Approximately 12 miles of slack water must crossed to reach Leslie Gulch. Recreation facilities at Leslie Gulch include a boat ramp, restrooms, parking area, camping area, and trash receptacles.

West Little

Access to the West Little Owyhee River is at Anderson Crossing (Map 4B) on the Star Valley Road. Travelers can get to Anderson Crossing via Highway 95 from Rome (heading south on the west side of the Owyhee River) or from Highway 95's Jackson Creek turn-off approximately 15 miles north of McDermitt, Nevada. Visitors should use a high clearance, four-wheel drive vehicle during wet road conditions.

North Fork

The access route to Three Forks, described above for the Owyhee will provide access to the mouth of the North Fork (Map 3C). Idaho provides another access opportunity to the North Fork Owyhee. Head east from Jordan Valley, taking the first right fork, and follow the signs to Juniper Mountain. Idaho BLM maintains a campground facility near the North Fork bridge crossing. The site includes a handicap-accessible toilet, picnic tables and fire rings.

Wilderness Study Areas

Wilderness Study Areas (WSAs) are managed under FLPMA and BLM's "Interim Management Policy and Guidelines for Lands Under Wilderness Review" (IMP). Both FLPMA and the IMP require BLM to protect the wilderness values within these WSAs until Congress designates them as wilderness or releases them from wilderness study status.

Owyhee — The Owyhee National Wild and Scenic River passes through four WSAs. These WSAs are Blue Canyon (OR-3-73), Owyhee Breaks (OR-3-59), Lower Owyhee Canyon (OR-3-110), and Owyhee Canyon (OR-3-195). Maps 1 A through 1C show these WSA boundaries related to the Owyhee River corridor. All the Wild and Scenic River corridor acreage within these WSAs is recommended by the BLM as suitable for designation as wilderness.

West Little — The West Little Owyhee National Wild and Scenic River passes through the Owyhee Canyon WSA (OR-3-195) and the Upper West Little Owyhee WSA (OR-3-173). Maps 2A & 2B show the WSA boundaries related to the river corridor. All the Wild and Scenic River corridor acreage within these WSAs is recommended by the BLM as suitable for designation as wilderness.

North Fork — The North Fork Owyhee National Wild and Scenic River overlaps the Owyhee Canyon WSA (OR-3-195) for the last 1/3 mile of its preliminary boundary before joining the main Owyhee River. Map 1C shows the WSA boundary related to the river corridor. The WSA acreage within the North Fork NWSR is recommended by BLM as suitable for wilderness.

Areas of Critical Environmental Concern

An Area of Critical Environmental Concern or ACEC is a designation given to lands in need of specialized management measures. The Owyhee River ACEC was designated in 1983 to protect the scenic and geologic values of the Owyhee River and adjacent land forms within the line of site or within 1/4 mile of the canyon rim. The ACEC encompasses approximately 30,500 acres of the Owyhee River canyonlands. The ACEC boundary approximates the wild and scenic river boundary covering the same two segments of the wild and scenic designated corridor.

Agriculture

There is only one agricultural permit authorized along the Owyhee River and it is at Rome, outside the designated river corridor. This permit authorizes use of federal public land for hay production. BLM authorized a right-of-way authorization for an irrigation pump to pump water from the Owyhee River to nearby fields. The pump is located across river from the Rome Launch Site (outside the designated corridor).

Minerals

Owyhee — No mining claims or mineral/energy leases are found within the Wild and Scenic River corridor nor is any known mineral/energy development or exploration occurring. Some mineral exploration and development have occurred, and continues, near the river in a few locations along its course. The most notable locations are: (1) The Sheep Head mining district, located along the east wall of the Owyhee Canyon approximately one mile downstream from Birch Creek, where several tons of "picture jasper" have been removed from five mining claims since the mid-1960's; and (2) the Rome area, where intermittent exploration for zeolite and fluorite has occurred since the late 1950's.

West Little — No mining claims or mineral/energy leases are located within this Wild and Scenic River corridor. No known mineral/energy development or exploration has ever taken place in the immediate vicinity of this river.

North Fork — No mining claims or mineral/energy leases are located within this Wild and Scenic River corridor, and no known mineral/energy exploration or development has ever occurred in the area.

Utilities

Although there is no formal utility corridor designation through, across, or over the Owyhee River System, land use planning identified a major right-of-way corridor for a future 500 KV power transmission line. This corridor route was identified in the western right-of-way corridor study. The proposed right-of-way route transverses east to west and crosses the Owyhee River near the mouth of China Gulch, just south of Rome and outside the designated Wild and Scenic River. Pacific Power and Light (PPL) filed for the proposed power line as their primary route and later the route was moved north of the Owyhee Dam by a decision from the Secretary of the Interior. However, PPL still wants the proposed corridor route near Rome for future consideration.

Withdrawals

A large portion of the Owyhee River is encumbered with major withdrawals of the Federal Energy Regulatory Commission (FERC) and the Bureau of Reclamation (BR). Hundreds of parcels of land were withdrawn through Executive or Secretarial Orders for power site reserves and reclamation construction projects in the early 1900's. The FERC withdrawals encompass the entire river except the section between the confluence of the West Little Owyhee and the Oregon-Idaho state line. The BR withdrawals are confined to approximately the lower 10 miles of the designated wild river below Birch Creek. In the lower reaches of the Owyhee, the FERC and BR withdrawals overlap each other, with the FERC withdrawals being primary and the BR withdrawals secondary.

The BR withdrawals have mineral segregation, eliminating all forms of mineral entry. The FERC withdrawals are not segregated from mineral entry. Therefore, mining activities could potentially take place on the FERC withdrawals outside the 1/4 mile wild river mineral withdrawal boundary.

The Federal Land Policy and Management Act of October 21, 1976 (FLPMA) mandated the Secretary to review existing withdrawals on lands within the National Wild and Scenic River System (NWSRS) and determine whether, and for how long, the continuation of the withdrawal of the lands would be consistent with the statutory objectives of the NWSRS. This withdrawal review was scheduled for completion in October, 1991. However, this review process has been extended to October, 1997.

Land Acquisition

BLM has transacted two land purchase acquisition on the Owyhee River. One acquisition of approximately 1,087 acres included the Birch Creek and Morrison developed sites along with many tracts of undeveloped land. The other acquisition includes The-Hole-In-The-Ground Ranch which is approximately 160 acres. Management of these properties is under interim directives until this planning phase can develop an effective management strategy. BLM also acquired one scenic easement at the Five Bar Ranch area. This easement covers approximately 107 acres.

Currently, there are plans for additional acquisitions along the Owyhee River to protect the river resources when and if funding is available and on a willing seller/willing buyer basis. To date, no acquisitions have been made on the West Little or North Fork Owyhee Rivers.

Land Tenure Adjustment

There are plans to make two land exchanges with the State of Oregon. The first is known as "Clean Up II" and includes exchanging both surface and mineral estate. The second is known as the "Split Mineral Estate" land exchange and would involve only the subsurface mineral estate. The "Clean Up II" land exchange could involve the Owyhee and North Fork Owyhee Rivers, while the "Split Mineral Estate" land exchange could involve the Owyhee and West Little Owyhee Rivers.

Negotiations with the State of Oregon continue and no exchange has been finalized. All efforts will be made to protect special management areas such as the river environments.

Environmental Consequences

The environmental consequences section shows the analysis of impacts (consequences) of management alternatives. This section provides a summary of the effects of each alternative on the outstandingly remarkable values (ORVs) and those resources directly connected to ORVs (i.e., vegetation and water). In addition, the section contains a description of what will happen to the various resources and uses within the river corridors if the actions of each of the alternatives are implemented. These effects (both negative and positive) may be short or long term, direct or indirect, or cumulative. The critical elements of Flood Plains, Native American Religious Concerns, Prime or Unique Farmlands, and Hazardous or Solid Waste are not effected. The effects of the other critical elements, Air Quality, ACEC, Cultural Resources, T&E Species, Water Quality, Wetlands/Riparian Zones, Wild and Scenic River, and Wilderness, are described in this section.

Vegetation

Alternative A

This alternative would provide the greatest level of inventory, monitoring, and protection of the vegetative resource of the three river corridors. Our knowledge of riparian, upland, and special status plants of the corridors would greatly improve, thus providing more options in the future for managing this resource.

Although livestock and recreation use would continue under this alternative, impacts would be reduced through increased monitoring and measures established to protect and enhance the vegetative resource. Livestock utilization levels on riparian and upland vegetation would be reduced, and livestock trailing impacts would be minimized. Also, recreation activities which may cause impacts to the riparian and upland habitats would have increased monitoring, and if necessary, recreation would be restricted.

An increased chance of sensitive plant protection would be fostered because inventory and monitoring strategies, focusing on livestock and recreation use areas and unique soil areas, would signal the extent of such species and their level of health.

Rehabilitation efforts such as on cultivated fields would bring back natural diversity in those areas.

Alternative B

Continuing with the current situation would not provide any increased benefit to vegetation within the corridors. Recreation use would continue to be monitored, and impacts to vegetation would be reduced as much as possible. Livestock use, especially at water gaps and on trails, would continue to impact riparian and upland vegetation. Inventory, monitoring, and protection of sensitive plants would not increase. Weed infestation and erosion from previously cultivated fields would impact the vegetative diversity in those areas and assist in spreading weeds down the river. Overall, inventory, monitoring, and protection of the vegetation resource of the corridors would be minimal.

Alternative C

This alternative would benefit the vegetation within the corridor due to complete removal of livestock. However, increases in facility and road development and recreation use under this alternative would negatively affect vegetation within the river corridors. Impacts would include loss of vegetation from development, soil compaction and loss of vegetation from high concentrations of visitors. Impacts would be highest at facility and road development areas where visitors would congregate. These impacts may offset the impacts eliminated from the removal of livestock.

Scenery

Alternative A

Scenery management would be similar under all three alternatives because all three follow VRM class I objectives. However, this alternative emphasizes the requirements of VRM class I and includes contrast ratings on all projects. In addition, scenery is further protected by an additional mineral withdrawal on the Main Owyhee and a proposal to withdrawal the remainder of the West Little and North Fork Owyhee corridors through the next Resource Management Plan.

Alternative B

Scenery management would follow VRM class I objectives and provide protection of the scenic resource through project review and periodic river patrols. Lack of funding for the State Scenic Waterways program limits that programs ability to acquire scenic easements or work with local landowners, agencies, and others in mitigating visual impacts. The West Little and North Fork Owyhee Rivers would continue to receive minimal emphasis.

Alternative C

The effects would be the same as under alternative B.

Cultural

Alternative A

This alternative would result in complete inventories and evaluations of cultural resource sites of all three river corridors. Protection measures and interpretation would utilize this more comprehensive data base. Impacts from recreation and livestock activities and natural forces would be reduced, and where possible, eliminated. Mitigation of sites adversely affected may be undertaken (i.e., excavation/data retrieval). Site stabilization work would occur to protect sites. Interpretation information on area prehistory, history, and cultural resource site protection would be available at developed sites where the greatest number of users congregate, providing a wide audience for education efforts.

Alternative B

Archaeological and historical resources would be managed and protected according to existing federal and state laws. Inventory and monitoring would not receive increased emphasis, especially in the West Little or North Fork Owyhee river corridors. Emphasis on cultural resources within the Main Owyhee River corridor would increase once the Cultural Resource Management Plan (CRMP) is developed and implemented. The CRMP would potentially outline interpretation and education programs. Interpretation and education on the West Little and North Fork would be minimal. The knowledge of the Owyhee River System cultural resources would be limited and site protection measures would typically not be undertaken until damage was all ready occurring to a known site.

Alternative C

The effects would be the same as under alternative B.

Wildlife

Alternative A

This alternative provides the highest degree of inventory, monitoring and protection of wildlife habitat of all the alternatives. Increased knowledge of wildlife habitat and species abundance, especially those species contributing to the ORV designation such as raptors and bighorn sheep, would provide more information and options on protection and management of wildlife in the future. Increased emphasis on coordination with Oregon Department of Fish and Wildlife and on interpretation/education efforts would benefit management and protection of this ORV/Special Attribute. If uses are creating adverse impacts to wildlife, measures to mitigate those impacts would be undertaken.

Alternative B

This alternative relies on monitoring populations of bighorn sheep and waterfowl to detect changes in species numbers and habitat use. Inventory data would probably continue to be inadequate, thus not enable effective management and protection measures. Education/interpretation for the Main Owyhee may increase at developed sites and through brochures, etc.

Alternative C

The effects would be the same as under alternative B.

Geology

Main Owyhee only. See the affects on scenery from all three alternatives.

Water

Alternative A

Water rights for instream flows for protection of ORVs would be managed through the State of Oregon water rights process. Water quality impacts within the river corridors would be reduced under this alternative. Improvements to water quality would occur at locations within the river corridors. Offsite impacts to water quality would be reported to and coordinated through Oregon Department of Environmental Quality. Monitoring efforts under this alternative would increase protection of water quality.

Alternative B

Continuing with the existing management program for instream flows and water quality would not provide adequate protection and enhancement of ORVs dependent of water flows and quality water. Cooperation and coordination between state and BLM has not provided adequate water quality monitoring for the Owyhee system.

Alternative C

Although the Wild and Scenic Rivers Act allows for a Federal Reserved Water Right, it also stresses cooperation and coordination between state and federal agencies. If BLM were to exercise a Federal Reserved Water Right, the instream water right flows, based on historical and current data, would probably be very similar to OWRD's flow assessment levels.

No increased emphasis would be established on water quality management under this alternative. Effects on water quality would be the same as those described under Alternative B.

Recreation

Alternative A

Recreation opportunities under this alternative would be primarily managed under the primitive type described in the Recreation Opportunity Spectrum, as is consistent with wild river areas. Management emphasis on other primitive types of recreation opportunities such as non-motorized trail use would increase. Use controls would be enforced which may impact primitive recreation opportunities/experiences, but would be only those necessary to protect and enhance ORVs. Facilities, signing, and other visitor services would harmonize with the environment, provide the level of management necessary within wild river areas, and provide for visitor health and safety.

Alternative B

The 1986 plan established a good foundation for recreation management within the Owyhee river corridor. However, the monitoring program and implementation of the plan would continue to fall short of providing protection and enhancement of the recreation ORV.

Alternative C

This alternative increases recreation opportunities within the river corridors. However, recreation opportunities move away from the primitive type towards the more developed type. This

alternative calls for more facility development (hiking trails and campgrounds) and road upgrade than Alternative A. The complete removal of livestock from the river corridors would improve the recreation ORV. However, overall this alternative would not provide adequate protection and enhancement of the recreation ORV for these wild river corridors.

Cumulative Impacts

Implementation of Alternative A is not expected to result in significant cumulative impacts to any resource base. It is expected to reverse the accumulation of impacts from uses such as grazing and recreation, which are degrading cultural values and impacting scenic values.

Mitigating Measures of the Proposed Action

Alternative A recognizes the need to allow for certain development and land use management within the planning area in a responsible manner that also recognizes the need to protect sensitive and unique cultural, visual, recreational, and biological resources. Specific projects or actions, not specifically addressed in Alternative A, would be addressed in separate categorical exclusions or environmental assessments, as necessary. Mitigation is included in existing law, BLM policy, regulations, and Alternative A.

Irreversible and Irretrievable Commitment of Resources

Implementation of Alternative A would not result in any irreversible or irretrievable commitment of resources.

Consultation and Coordination

Agencies or Persons Consulted

See Appendix A

List of Preparers

See Appendix A

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
VEGETATION	Scenic quality management through VRM objectives and monitoring would protect vegetation. The extended mineral withdrawal on the Main Owyhee would protect vegetation from disturbance created from potential mining coming into the area. Maintaining both natural and some introduced plants at the Birch Creek Ranch would be a high priority in order to protect the diverse wildlife habitats and maintain and enhance the outstanding scenery. By producing alfalfa or native hay at the Morrison field and rehabilitating the Birch Creek field vegetative values and diversity would be greatly enhanced. Relocating the maintenance road at the Morrison site would assist in protecting the candidate species Errters Groundsel. Stabilizing cultural sites would help stabilize soil in these localized areas which would potentially improve vegetation in these same areas. Excavating cultural sites to retrieve data would negatively impact vegetation at localized areas. Protective measures established to protect and enhance riparian, upland and special status species vegetation would be a positive effect. Livestock and wild horse management under this alternative would benefit vegetation within the canyon, especially riparian. The benefit would parallel the extent to which the livestock and wild horses are managed or excluded. Establishing utilization maximums would significantly reduce utilization levels on vegetation within the river corridors. Plant vigor and cover would increase with reduced plant utilization. It is most likely that alternative watering methods and grazing systems can be accomplished on the majority of livestock-impacted sites with riparian potential along these rivers. Impacts around troughs or other watering sources above the rim would occur, but these	Maintaining both natural and introduced vegetation at the Birch Creek Ranch would be a priority in order to protect diverse wildlife habitats and maintain the outstanding scenery. However, it is important to maintain the alfalfa field at the Morrison site due to its importance in stabilizing the plant communities to avoid encroachment and dominance of weed species. Encroachment of weed species has already occurred on the upper field. Significant impacts to vegetation from livestock grazing at concentrated sites would continue as utilization criteria for removing livestock from the pasture would still be measured above the rim instead of in the river corridors. Since the river corridors receive more concentrated grazing use than areas above the rim, the vegetation within the corridors would be expected to be negatively impacted. Certain areas (such as Sand Springs) are experiencing no perennial plant growth due to livestock grazing, in other areas the riparian vegetation condition remains constant or static, not improving. Current methods of trailing livestock through the river canyons impact soil, vegetation and dependent resources such as fish and wildlife. Livestock remain too long creating significant soil and vegetation disturbance in concentrated areas of the canyons. Failure to manage for instream flow needs may not provide adequate levels of protection for the vegetative resources of the rivers. Although vegetation is not an ORV, it relates directly to wildlife habitat and adds to scenic quality and should be protected. Moderate water quality problems could continue and expand to severe problems. Plant growth would probably be reduced. Al ze to ev nd does not ac lin number	Since several management options are lumped into this alternative for management at the Birch Creek Ranch, differing types and levels of impacts would occur. Disturbance and destruction of vegetation would occur during removal of all the structures and abandoning the sites. Weed species would invade and predominate on sites disturbed for a long time. Trees would eventually die and plant diversity would be greatly reduced. The well-being of vegetation would vary with the efforts of the concessionaire. It is likely that a loss would occur due to the lack of ownership and vested interest. It is highly likely that a concessionaire would have to increase use to make it a profitable business thus potentially increasing impacts to native vegetation from higher levels of concentrated human use. If its developed into a high public use area the effects on vegetation would depend on the manner and degree of maintenance and use supervision. Increased use in this concentrated area would provide the potential for increased vandalism and degradation of vegetation. Without providing human intervention in management of the upper field at the Birch Creek site weed species would continue to increase due to their abundance and the lack of native plants from past cultivation. Removing livestock from the canyons completely, would eliminate impacts to vegetation from livestock grazing. Plant vigor and vegetative cover would be expected to increase faster than under alternative A. Major improvement of vegetative cover in livestock water gap/trail crossing areas would be expected. Prohibiting jet boats would prevent breakdown of banks from jet boat wakes thus preventing potential disturbance to riparian vegetation.

Affected Environment	Alternative A	Alternative B	Alternative C
VEGETATION (Cont.)	impacts would be considerably less than the impacts to vegetation within accessible areas within the corridor. Waters above the rim would provide better distribution of available and authorized forage. Providing holding facilities outside the river corridors would reduce impacts to vegetation within the river corridor and may improve vegetation. Trailing requirements would minimize impacts to soil and vegetation and associated resources such as wildlife by reducing areas of soil compaction, denuded vegetation, livestock feces, etc. Using the instream flows from Oregon Water Resources Department and instream water right applications by ODFW and Oregon Parks and Recreation Department allows a baseline for effective management of river values. Monitoring these instream flow and managing for them would provide added data to be able to make changes, if necessary, in instream flow requirements. Working with the state affected agencies for managing minimum instream flows on the Owyhee System would provide a tool to assist in protecting vegetation within the river corridors. Exercising a Federal Reserve Water Right for instream flows would provide last resort protection of streamside vegetation. Water quality monitoring would assist in protective management of riparian vegetation. Improved coordination with appropriate state agencies and potentially installing long-term stream flow stations would help protect water quality within the river corridors. Shoreline vegetation can be adversely impacted by human use due to high levels in concentrated areas. The level at which human impact becomes detrimental is not known. Using the LAC process to establish criteria to monitor the well being of canyon flora would provide protection of such flora. Stress upon vegetation from human use would be one criteria in establishing an upper limit of human use. A principle concern would be the continued	of people may not provide the needed protection. Due to drought conditions and low use levels minimal impacts are occurring. During seasons of normal water levels the middle and lower sections of the Owyhee River receive trampling of vegetation, soil compaction and social trails at popular campsites. The middle section with its small number of campsites and small campsite capacity may receive significant impacts during the first normal water year before management can react. Impacts from social trails may also occur within the West Little and North Fork Owyhee River Canyons. Minor impacts are occurring to vegetation from dispersed camping and general recreation use at Three Forks. Although drought conditions have led to lower use levels of river boaters, general recreation use at Three Forks is increasing. Impacts to vegetation are occurring from trash, human waste, and vehicle travel off existing routes. Vandalism of the chemical toilet can cause leakage of human waste thus negatively impacting vegetation. Little effect on vegetation from present use levels at Anderson Crossing has been noted. Although, increased vehicle and human use could adversely impact willows and shrubs along the river, thus disrupting the riparian environment. Birch Creek Road receives high use in the spring when road conditions are usually poor. Impacts to vegetation occur when vehicles drive off roads to miss mud holes or ruts and when they slide off roads due to slick conditions. Uncontrolled vehicle access from the north through the river and into the Morrison site can cause extreme degradation of vegetation. Vandalism could result in loss of trees, shrubbery and herbaceous vegetation that all have the potential to play a part in the significance of this site as eligible for the National Register of Historic Places. Impacts and benefits of administrative boundary	Existing knowledge on the resiliency of the vegetation within these river corridors is not yet available to facilitate establishing meaningful human use limits. Developing springs and constructing water caches would disturb vegetation in these areas. Increased use in these areas would also disturb vegetation through trampling and soil compaction. Any type of development such as turning the Rome Launch site into a highway rest stop, changing the location of the Rome Launch site, providing water caches, developing springs, or developing a primitive recreation site at Anderson Crossing would disturb new areas thus negatively impacting vegetation in these areas. Benefits do not outweigh negative impacts. Removing existing facilities at Three Forks and providing no controls at this high use area would significantly impact vegetation over time. Scattered patterns of concentrated use would continue as well as toilet paper fields, improperly disposed of human waste, and cross-country travel. As use continues to increase so would impacts to vegetation. Allowing public use of the landing strip at the Morrison site would increase human use thus potentially increasing vandalism and disturbance of vegetation. Management of solid human waste under this alternative would lessen impacts to vegetation from latrine digging and soil contamination. Not managing for disposal of solid human waste may create on-site and off-site impacts to vegetation through illegal dumping. Upgrading Birch Creek Road to 2-wheel drive, dual lane access roads would significantly impact vegetation. Re-routing would be required which would disturb new areas of significant size. Several Federal Category 2 plants have been identified along the Birch Creek Road. Disturbance of these habitats

ENVIRONMENTAL CONSEQUENCES

Affected Environment		Alternative B	Alternative C
VEGETATION (Cont.)	reproduction of desired plant species. This process would be implemented to provide a positive benefit to vegetation. Restricting spring, water cache, and trail development would provide a positive benefit to vegetation. No surface disturbance around springs or water caches would occur. Less disturbance would occur from human use of springs. No vegetation disturbance from trail development would occur except if trailhead boxes are installed then minimal disturbance would occur. Loss of some vegetation would occur from the development activities at Rome, Three Forks, and Anderson Crossing. Improving these sites would benefit vegetation by controlling use and preventing widespread impacts. Also, some landscaping would occur thus enhancing vegetation at some rather barren sites. Patrols and scheduled maintenance of campsites and trails would assist in keeping impacts down thus protecting vegetation. Vegetation would benefit by increasing education efforts and visitor service through teaching visitors low impact techniques and educating visitors about vegetation especially sensitive species. Establishing and requiring carry-out methods for solid human waste and firepans eliminates the need to dig latrines or fire pits, thus protecting vegetation at campsites. Eliminating use of the airstrip at Morrison and illegal airstrips within the canyons would reduce impacts to vegetation by preventing off-road vehicle use in this area. Closing road int nortl id of the Morrisor site wou esult in secu protection of the vegetativ esources nat and nonnative) of the Mor n Ranch	designation would be the same as under the proposed action.	is highly undesirable. Closing access crossing the river and entering the Morrison site with a fence and gate would correct the potential problem which threatens vegetation along the river and at the site. Minor impacts would occur to vegetation during installation of the fence/gate barrier. However, the long-term benefit would be positive. To enforce the Bogus Creek Road closure, a physical barrier would be installed that would undoubtedly create minor impacts to vegetation. Negotiating for easement access on The-Hole-in-the Ground and Black Rocks Roads would provide for increased access thus the potential for increased use and increase impacts to roadside vegetation. Developing a hiking trail system through the canyons would provide a negative impact to vegetation. In addition to disturbing and destroying vegetation during construction of the trail, the degree of negative impact would be dependant on the level of human use. Impacts to the sensitive endemic plants found along canyon walls may also occur. Restricting boundaries to a minimum distance from the river would fail to afford legal protection to unique plants such as Packard's sagebrush (which only occur on protected ledges of the canyon walls) and other endemic plants. Small tributary canyons provide excellent habitat for this and other endemic plants.

Affected Environment	Alternative A	Alternative B	Alternative C
VEGETATION (Cont.)	Road machinery work would cause disturbance to road-side vegetation. However, the improved road condition would lessen the instances of route proliferation, thereby reducing potential adverse affects. No new access roads and closing Bogus Creek Road, from the creek down to the river, would positively benefit vegetation. Through a cooperative management agreement with DSL, more coordinated livestock management should improve vegetation on state and federal lands. Acquisition ensures protection from inappropriate development which would benefit vegetation. The proposed administrative boundary encompasses all noteworthy vegetation within the rivers' environment including the special species (Category II, etc.) listed in the Affected Environment section (Chapter Five). Important side canyon riparian and endemic vegetation is included within the proposed boundaries. Effects would be positive.		
FISH & WILDLIFE	The extended mineral withdrawal on the Main Owyhee would protect fish and wildlife from disturbance created from potential mining coming into the area. Wildlife would benefit from maintaining the lower field and rehabilitating the Birch Creek field through improved habitat and forage. The no shooting zone at Birch Creek Historic Ranch would have a positive benefit for wildlife in this area. Excavation of cultural sites may negatively impact wildlife through disruption or removal of habitat in localized areas. Fish and wildlife would benefit through improved coordination with ODFW and increased inventory and monitoring resulting in more effective habitat	Minimal maintenance of fields and vegetation at Birch Creek Ranch would have some impacts on wildlife due to potential degradation of wildlife habitat. The alfalfa field, not irrigated in 1991 due to low maintenance funding, is heavily used by wintering mule deer. Significant impacts to wildlife habitat from livestock grazing at concentrated sites would continue. Nonpoint source pollution from livestock grazing would continue to impact water quality, fisheries and aquatic habitat. Failure to manage minimum instream flow needs may not provide adequate levels of protection for the important fish and wildlife resources of these rivers.	Allowing the Birch Creek field to revegetate naturally would not provide effective rehabilitation. Weed species would continue to invade due to their abundance and the lack of native species. Wildlife habitat values would greatly diminish. Impacts under the Birch Creek management options for this alternative include: Removing all structures and not maintaining the area would allow for tree and vegetation loss from lack of irrigation. Plant diversity would be greatly reduced with a resultant loss of wildlife habitat and associated wildlife. Although this is non-native vegetation, it has been maintain for many, many years providing increases in wildlife diversity in the rive corridor.

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
FISH & WILDLIFE (Cont.)	and species management. Improving livestock management would benefit fish and wildlife through habitat improvement. The degree of benefit would parallel the extent of livestock management. Reducing livestock utilization of key forage plants would increase available forage for wildlife. Managing livestock gathering and trailing through the river canyons would benefit fish and wildlife habitat. Less impacts to shoreline vegetation and sedimentation would occur. Managing wild horses within the river corridors to maintain a thriving ecological balance would improve wildlife habitat and forage availability. Determining and managing for minimum instream flows would provide a tool for protecting the river corridors fish and wildlife resources. Establishing water quality monitoring, coordination with appropriate state agencies, and potential long-term flow stations would provide added protection for fish and wildlife. Potential decreases in water quality would be determined allowing BLM to establish management actions to reverse the situation. Using the LAC process to develop quantifiable standards to monitor resource and social conditions provides a positive benefit in terms of protection of the wildlife and wildlife habitat. Prohibiting motorized watercraft on the Owyhee Wild River System would benefit nesting geese. Power boat wakes disrupt nests and break down banks. The noise and wakes of motorized watercraft may stress nesting geese. Maintaining the habitat diversity at Birch Creek Ranch would be a positive benefit to wildlife. Enhancing the vegetative diversity through establishing native species on degraded areas would	Current management of water quality is not adequate. Oregon DEQ reports these three rivers as having moderate nonpoint source problems affecting water quality, fisheries and aquatic habitat. Waiting for changes and impacts to occur before setting use limits would not provide enough protection of fish and wildlife values. Carrying capacity levels were not established, therefore human induced impacts to fish and wildlife habitat and, potentially, species would become the signal that carrying capacity is too high for protection of fish and wildlife values. Raptors are sensitive to activity above their nests so hiking on the rim, whether on a developed trail or not, may cause stress to raptors. Trash accumulation and trampled vegetation are impacting fish and wildlife habitat at Three Forks due to uncontrolled concentrated use. There has been no documented effect on wildlife from current use at Anderson Crossing. Although, increases in uncontrolled vehicle and human use could negatively impact fish and wildlife habitat in this area. Without a legal solid human waste carry out and disposal system, solid human waste would increase along the river and outside the corridor when not properly disposed. Dependent upon the level of human use, wildlife habitat could be significantly impacted. Jet boats may cause impacts to fish and wildlife. Impacts include stress from the noise and speed. During nesting season, jet boats may cause stress to Canada geese and other waterfowl along the rivers. Power boat wakes disrupt nests, break down banks and stir up silt. Speed-related wakes in the narrow Owyhee canyons can create significant disturbances. Eventually, the road into Birch Creek Ranch would degrade to the point of major resource damage to	The well being of wildlife and habitats would vary with the efforts of the concessionaire. It is likely that a loss would occur due to the lack of ownership and vested interest. Increases in use necessary to make a profitable business would likely bring increased impacts to wildlife habitat. Effects on habitats and associated wildlife by developing the area into a high public use facility would depend on the manner and degree of maintenance and use supervision. More generalized public use would potentially cause impacts to wildlife such as habitat degradation, stress, dispersement, and poaching. Fish and wildlife habitat values would be more enhanced, than alternative A, through removing livestock grazing and trailing from the river corridors completely. Available forage for wildlife would be increased above that available under alternative A. Federal Reserved Water Right would provide for federal protection of fisheries and other wildlife within the river canyons. If water quality management is not increased, the moderate nonpoint source problems may degrade to severe. Data on the resiliency of numerous fish and wildlife species within the canyon ecosystems is not yet available to assist in establishing meaningful human use limits. Impacts to habitat and species may occur before carrying capacities (not effectively defined) are met. Spring development may degrade wetland sites and thus have an adverse impact on vegetation and dependent wildlife. Providing no facilities at Three Forks would create minor adverse impacts on wildlife and habitat from the scattered pattern of use throughout the area.

Affected Environment	Alternative A	Alternative B	
FISH & WILDLIFE (Cont.)	benefit the wildlife resource. Minor impacts may occur to fish and wildlife with increased human use at Birch Creek Ranch. However, management would focus on educating the visitors and protecting fish and wildlife. Minor impacts to wildlife may occur due to dispersed hiking use. Raptors would receive more impact (stress) when hiking occurs on the rim above raptor nests rather than down inside canyons. Loss of some habitat would occur from the development activities at Rome, Three Forks, and Anderson Crossing. Improving recreation opportunities at these sites would provide an overall benefit to habitat by controlling use and preventing widespread impacts. Also, some landscaping would occur thus enhancing habitat at some rather barren sites. More controlled management of solid human waste carry-out and disposal would provide a positive benefit to fish and wildlife. The potential for soil contamination and decreases in water quality would be significantly reduced. Increases in recreation use from increases in information may impact wildlife, but increases in patrols and monitoring would protect wildlife and wildlife habitat. Increases in Law enforcement personnel assisting on patrols would benefit wildlife through enformcement of fish and game laws. Prohibiting non-administrative or non-emergency aircraft use within the river canyons would help reduce the existing poaching problem. Fish and wildlife would benefit by increasing education efforts and visitor service through teaching visitors low impact techniques and provide information on fish and wildlife and their habitat. Temporary minimal impacts would occur to wildlife during any road machinery work to maintain or improve road access to the rivers. Impacts may	the creek and surrounding area. Wildlife habitat would be impacted from this erosion. Uncontrolled access into the Morrison site from the north may cause extreme degradation of vegetation and related wildlife habitat. Also, such access may contribute to poaching. Impacts and benefits of the administrative boundary designations would be the same as under the proposed action.	Acquiring deeded land down river from Rome and developing a new launch site would impact wildlife in the area. Impacts include loss of habitat. By upgrading Birch Creek Road to 2-wheel drive, dual lane road would impact wildlife. Habitat would be lost from construction and realignment work and increased public use would cause stress to wildlife and provide for increases in vandalism and poaching of wildlife. Opening the airstrip for public use would greatly increase the potential for wildlife impacts from poaching. Developing a hiking trail throughout the canyons would create a negative effect on all wildlife species. The degree of this effect would depend on the amount of human disturbance from construction and subsequent use. Restricting boundaries would not protect critical habitat thus reducing management protection of fish and wildlife. Canyon walls and associated tributaries are critical habitat for raptors. Fish within the rivers are dependent on healthy streamside vegetation and important side streams. Bighorn sheep not only frequent the river canyons but also the various benches throughout the canyon complex. Therefore this alternative would not include sufficient habitat to maintain complete environments for important fish and wildlife species.

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
FISH & WILDLIFE (Cont.)	consist of stress to and mortality of rodents. Closing the road into the north end of the Morrison site would result in more secure protection of the area's fish and wildlife resource. Potential stream pollution and disturbance from vehicle use through the river would be eliminated. Poaching opportunities would also be reduced thus better protecting wildlife. Reducing vehicle encroachment and possibly reducing human induced stress on the habitat and species would be positive benefits. A CMA between BLM and DSL may provide positive impacts to fish and wildlife habitat through more effective management. Fish and wildlife could benefit from the withdrawal revocation process due to BLM's ability to provide more effective management of fish and wildlife habitat than Bureau of Reclamation and Federal Energy Regulatory Commission could in these areas. Acquisition of private land would eliminate construction and development of these lands thus protecting fish and wildlife habitat. Protection and enhancement of habitat (see vegetation above) produces benefits to the wildlife resource. Since the proposed boundaries would benefit vegetation/ habitat values, it therefore benefits fish and wildlife values.		
CULTURAL	VRM Class I management may impact cultural site excavation projects due to the minimal disturbance allowances under class I objectives and guidelines. The extended mineral withdrawal on the Main Owyhee would eliminate disturbance to cultural sites from potential mining. Management of the Birch Creek Ranch area would be consistent with the NHPA and ARPA.	Management of the Birch Creek Ranch would be consistent with the NHPA and ARPA. Damage to historical and archeological resources would continue without developing and implementing a specific cultural resource protection plan for these rivers. As funding and personnel allow, and as directed by the 1986 Owyhee Wild River management plan, a cultural resource management plan would be developed.	The different management options for the Birch Creek Ranch would create varying degrees of impact to cultural resources. Removal of the structures would require HABS/HAER documentation of the structures that contribute to the property's eligibility and a multi-step determination of adverse effect. No alteration could occur until a three party agreement between BLM, State Historic Preservation Office and the

Affected Environment	Alternative A	Alternative B	Alternative C
CULTURAL (Cont.)	Protecting and interpreting this cultural resource would provide a significant benefit for science and visitor education. Managing cultural resources through these inventory, monitoring, education, and stabilization programs would provide positive benefits to the cultural program and help protect its resource. Improving livestock management would reduce livestock impacts on archeological properties, benefiting cultural resources. Reduced trampling of sites would occur and impacts to historic sites from livestock leaning on structures would be reduced. Control of livestock gathering and trailing would help protect cultural sites along the rivers. Less trampling of sites would occur. The LAC process would benefit cultural resources through setting monitoring standards to protect against human and livestock surface impacts. Springs usually contain cultural sites. Cultural resources would benefit through no surface disturbance from spring development nor water cache construction. Maintaining primitive, dispersed hiking opportunities (limiting use) limits the potential for increases in surface collection of artifacts and potting and trampling of cultural sites. Increased patrols and scheduled maintenance of campsites and trails would provide for protection of cultural resources. Any new surface disturbance, such as development at Rome, Three Forks, Birch Creek, Anderson Crossing, and trailheads, may produce negative impacts by disturbing the site. Restrictions on firepan and solid human waste carry-out would prevent disturbance to cultural sites from digging firepits and latrines.	Current grazing practices adversely affect sites at specific locations where livestock access the river. Livestock milling breaks artifacts, deflates the ground surface and mixes artifacts, breaks down the river banks, and promotes erosion that can wash away parts of sites. Allowing the water rights to lapse and invasion of weed species on these fields is inconsistent with the ranches' eligibility as an historic landscape. Such action would be an adverse affect and would require a three-way agreement between the BLM, the State Historic Preservation Office, and the Advisory Council on Historic Preservation before the action could be undertaken. Although this alternative recognizes a need to eventually establish use limits, it would not account for conditions where a limit on the number of people may not provide the needed protection. Cultural resources would continue to sustain impacts by recreationists. Impacts from illegal activities include vandalism such as defacing petroglyphs, surface collection of artifacts, and excavation and associated looting. No facility development and limited management at Three Forks or Anderson Crossing would provide increased impacts to cultural resources parallel to increased use by recreationists. Impacts would include collecting, site degradation through camping and trampling, and vandalism. The bulletin board at Three Forks provides a way of educating users to protect cultural resources. Looting and vandalism of archeological sites would continue especially at Potters Cave along the Bogus Creek Road with increased use of the river access roads. Significant historical and archeological properties may be subject to vandalism and looting if access from the north into the Morrison site is not controlled.	Advisory Council on Historic Preservation has been signed. Properties significant to the Euro-American settlement of southeast Oregon would be lost. A concessionaire would be required to maintain the historic structures and landscape. Lack of ownership and increased use, needed for profitable business, may allow for potential impacts such as vandalism and degradation. Developing the area into a high public use site would have the potential to degrade this significant cultural site. Use supervision would have to increase and education efforts would help to reduce problems. Not maintaining the Birch Creek field and potentially allowing it to degrade due to the current weed infestation problem would impact the historic values of the area. Complete livestock removal (grazing and trailing) would have a positive effect on the cultural resource values within the river corridors. This action would prevent further impacts to archaeological sites from livestock. Livestock trampling of artifacts and site degradation would be eliminated. Removing the structures at Three Forks would require inventory and possible mitigation of adverse effect. Impacts would include loss of a potentially significant historic feature and potential for education/interpretation of the site. Maintaining the Three Forks cabin for public use would require increased use supervision to assist in protecting the site. Interpretation could be used to educate visitors on this historic resource value. The potential for vandalism is higher with increased use. Resource and social data and cultural inventories are not adequate to set use limits on these river corridors to protect cultural resources. Cultural resources would continue to sustain impacts by recreationists. Effects include camping on archaeological sites and collecting of surface

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
CULTURAI (Cont.)	Increasing recreation opportunity information may have a negative effect on cultural resources. However, increased educational efforts through brochures, bulletin boards, signs and visitor service (increased ranger staff) would have a positive effect on cultural resources. Generally, cultural resources would continue to be impacted by recreationists. Effects include camping on archeological sites and collecting by recreationists who find artifacts on the surface. Education and enforcement would be keys to reducing these types of impacts. Closing the road at the north end of the Morrison site would prevent unsupervised access to cultural resources in this area. The closure would reduce the potential for site damage from vehicles, vandalism and removal of cultural resources. Birch Creek Road improvement and all road maintenance would provide positive benefits to cultural resources by reducing route proliferation. The CMA with DSL would provide more effective management of all cultural resources within the river boundaries. Cultural resources may benefit from more effective management through the revocation of BR and FERC withdrawals to BLM. Acquisition of private lands within the wild river boundaries would provide a mechanism for inventorying, protecting and interpreting potential cultural resources on private lands. Significant cultural sites may exist on private lands within the river corridors. The proposed boundaries includes many cultural sites, many of which are not recorded. Cultural resources are an outstandingly remarkable value (ORV) of the Main and West Little Owyhee Rivers and the Wild and Scenic River Act mandates protection of ORVs.	Impacts from the administrative boundaries would be the same as under the preferred alternative.	artifacts. Springs often have important cultural sites in their vicinity. Any development of springs would require inventory and mitigation of adverse effect. Any new road work, or facility development, such as a wayside rest at Rome, a new launch site downstream of Rome, water caches, or a recreation site at Anderson Crossing would require a Class III cultural resource inventory. If sites are found they would be mitigated by avoidance or data recovery. Opening the Morrison airstrip to public use would increase opportunities for vandalism of cultural sites. Closing the route north of the Morrison site with a gate would provide some protection to cultural resource values. However, the determined vandal and looter would not be deterred by a gate. Use of The-Hole-in-the-Ground and Black Rocks Roads as access routes into the Owyhee River would continue to impact cultural resources. Significant cultural resources at The-Hole-in-the-Ground would be subject to looting, vandalism, potting, surface collection, and surface disturbance with easy vehicle access. Any hiking trail would require a Class III cultural resource inventory to identify sites. Trail construction impacts to significant sites would be mitigated by avoidance or data retrieval. Sites in the vicinity of the trail are likely to be impacted by casual collecting and, possibly, trampling.

Affected Environment	Alternative A	Alternative B	Alternative C
SCENERY	Managing scenic quality under this alternative would protect and enhance this resource through VRM Class I objectives and guidelines and scenic quality contrast ratings for development and resource use. Extending the mineral withdrawal for the Main Owyhee would protect scenic values from surface disturbance from potential mining within the river corridor outside the Congressional mineral withdrawal. Improving the vegetative condition of the fields at Birch Creek and Morrison would improve visual quality. Management of cultural resources under this alternative would lessen impacts to visual quality by reducing potting of caves and surface digging. However, excavation of sites to retrieve data would cause negative effects to scenic quality at localized sites. This effect may be temporary. Improved riparian and upland vegetation would enhance scenic quality. Management of livestock under this alternative, especially utilization maximums, would improve visual quality in the long term as vegetation condition improves, especially in riparian areas, and in the short term as evidence of livestock use (feces, utilization of plants) is reduced, especially in the camping areas. Management of wild horses under this alternative would protect scenic quality from impacts of wild horse use within the river corridor. Managing water quality to prevent decreased quality or degradation would benefit the scenic resource of these rivers. Improved water quality means improved visual quality. Using the LAC process on the Owyhee Wild River System would benefit scenic resources. The LAC process establishes protective measures for resource	VRM class I objectives would assist in protecting the scenic quality of the river corridors. Potted and vandalized cultural sites create surface disturbing visual impacts. These impacts would continue under this alternative. Management of livestock under this alternative would continue to negatively impact visual quality. Impacts would include areas of denuded vegetation, campsites littered with cow pies, and increased fecal coliform and sedimentation decreasing water quality. Cooperating with state agencies for management of instream flows would help maintain the scenic value of these rivers. Water quality management under this alternative would potentially lead to reduced water quality thus reduced visual quality. Management of carrying capacity under this alternative may allow impacts to visual quality while a use allocation system is being fully implemented. Potential impacts to vegetation, as described above under this alternative, would reduce visual quality. Also, overcrowding at popular campsites and at rapids reduces visual quality within this primitive wild river setting. Signs showing hunting and shooting restrictions may impact scenic quality as visitors pass by, but impacts would be significantly minimal and temporary. The chemical toilet at Three Forks is a bright color and stands out as a small visual intrusion. Latrine digging and toilet paper fields would continue which would reduce visual quality within the river corridors. With increased use may come decreased water quality from solid human waste thus reducing visual quality. Aircraft landings currently occurring on public lands within the river corridors create surfacing disturbing	VRM class I objectives would assist in protecting the scenic quality of the river corridors. The Birch Creek field cannot adequately revegetate naturally. Erosion and weed infestation all ready reduce visual quality. Impacts would continue. Removal of livestock under this alternative would improve visual quality throughout the river corridors in the long term as vegetative condition improves especially in riparian areas, and in the short term as livestock feces are eliminated. Improvements to scenic value would be expected to be greater than alternative A. Removing structures at Three Forks would improve visual quality of the wild river environment in the long term, but in the short term, surface impacts would reduce visual quality. Management of water quality under this alternative may lead to decreases in water quality thus reducing visual quality. Use limits set on the middle section of the Owyhee River may provide added protection of scenic values if reductions in numbers reduce surface disturbance. Spring development and water caches may provide temporary visual impacts as boaters and hikers pass by these developments. Adverse visual impacts would depend on the frequency of such developments. Mitigation could prevent adverse impacts. If cultural management allows for the removal of structures at Birch Creek and Morrison, wild river scenic value would improve in the long term, but be reduced in the short term from surface disturbance. High levels of human use at Birch Creek and Morrison may lead to reduced visual quality from surface disturbance, vegetation loss, and vandalism. The scenic quality of the Three Forks area would be

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
SCENERY (Cont.)	and social conditions. Impacts are reduced or limited including impacts to the areas scenic resource. Providing primitive, dispersed type hiking opportunities instead of developing permanent trails and foot bridges helps to maintain the outstandingly remarkable scenic value of these rivers. Although trails can be constructed with reduced impacts to resources, a visual intrusion would still occur. Dispersed type hiking would be managed to prevent social trails, erosion and vegetation impacts which would degrade scenic values. Increased patrols and scheduled maintenance of campsites and trails would have a positive effect on scenic resources. A primitive type camping area which includes a toilet facility would reduce the current visual impacts of toilet paper fields and trash accumulation. Scenic quality would be improved through management of campfires and solid human waste carry-out and disposal. Digging fire pits and latrines, and toilet paper fields along the river corridors would be eliminated or at least significantly reduced. Increased education efforts should assist in decreasing surface impacts thus reducing potential impacts to the scenic resources of these rivers. Eliminating aircraft landings within the corridor and restoring vegetation on unathorized airstrips would protect and improve scenic resources. Road work on the Birch Creek Road would not be seen from the river and most areas within the corridor due to its location within the drainage. Hikers on a nearby rim or ridge may see portions of the road work, but visual impacts would be temporary as the hikers move on and the surface disturbance becomes shielded from view. Closing	visual impacts. Continued erosion of the Birch Creek Road would eventually produce visual impacts from soil displacement, cutting and loss of vegetation. Access through the river near the Morrison site may cause surface and vegetative impacts that reduce visual quality. Maintaining primitive, dispersed type hiking opportunities maintains the outstandingly remarkable recreation resource of these river corridors. The potential for social trails from lack of visitor information and education may be high under this alternative which could reduce visual quality. Visual impacts may occur to state and federal lands if coordinated management, specifically livestock grazing, does not occur within the river corridors. Environmental consequences of the administrative boundaries would be the same as described under the preferred alternative.	impacted by developing a hardened-site campground. Reduced visual quality of the wild river environment would be the result. Scenic quality would be improved through management of solid human waste. Latrine digging and toilet paper fields along the river corridors would be eliminated or significantly reduced. However, without a facility for disposal of solid human waste, illegal dumping would probably occur at take-outs and off-site reducing visual quality. Temporary reductions in visual quality would occur as aircraft land and take-off from the airstrip at the Morrison place. Development of the Birch Creek Road would increase human intrusion of surface disturbing actions thus reducing visual quality within the river's viewshed. A widened, hardened surface road would be seen from more areas than the current road. Developing a permanent trail system with bridges would produce a visual intrusion on these wild rivers. Scenic value would be reduced. Potential development that would impair visual quality within the river corridors may occur if an acquisition program for protection of ORVs is not implemented. Reducing the administrative boundaries of the West Little and North Fork Owyhee River, eliminating some side drainages, would potentially lead to surfacing disturbing activities within the rivers' viewshed. Therefore, under this alternative, the outstandingly remarkable scenic value of these 2 rivers would not be fully protected. **(A.1.)**

Affected Environment	Alternative A	Alternative B	Alternative C
SCENERY (Cont.)	the ford at the Morrison place would prevent vehicle impacts that degrade the scenic quality of this area. Scheduled road maintenance and the road improvements on Birch Creek Road would reduce trail proliferation and erosion which would be a positive effect on scenic quality. Cooperative management with DSL for protection of the outstandingly remarkable values within the river corridors would benefit the scenic resources which is an ORV for each river. Acquiring private and state lands in order to protect the rivers' resources would benefit scenic values by preventing potential development that may impair visual quality within the area. The proposed administrative boundaries for the West Little and North Fork Owyhee Rivers encompass all the important viewsheds of these river environments. Since scenic resource values of these three rivers have been determined to be outstandingly remarkable, incorporating all the important river related scenic resources within the administrative boundaries provides protection through the Wild and Scenic River Act.		
GEOLOGY	Extending the mineral withdrawal of the Main Owyhee would protect geological resources from surface disturbance from potential mining. Increased education efforts through brochures, signs, and visitor service would provide interpretation of the geological resource of these river corridors. Impacts from collecting and vandalism would be reduced through education efforts.	Mining activities within the river corridors, outside of the Congressional mineral withdrawal, may impact unique geological features (ORVs for the Main Owyhee) through surface disturbance.	Mining activities within the river corridors, outside of the Congressional mineral withdrawal, may impact unique geological features (ORVs fro the Main Owyhee) through surface disturbance.
SOIL	Criteria developed for protecting scenic quality would prevent or reduce soil loss or significant soil impacts during project work.	Maintaining current management at Birch Creek Ranch would potentially provide for increased use which would create minor short-term impacts such as compaction and erosion from launching and landing boats and from trampling streamside	Allowing the Birch Creek field to revegetate naturally would cause impacts to soil through erosion. The field is too infested with weed species and does not have enough native plants to recover.

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
SOIL (Cont.)	Extending the mineral withdrawal for the Main Owyhee would prevent impacts to soils from surface disturbance from potential mining activities. Implementing rehabilitation measures on the Birch Creek field would be a benefit to soils. Seeding with a native vegetation cover would assist in soil stabilization. Maintaining the lower field in a vegetative cover would eliminate weed infestation and soil erosion problems. Stabilization of cultural sites may have negative temporary impacts to soil, but overall stabilization would be positive effect to soil. Excavation of cultural sites would negatively impact soils at localized sites. Management of gathering and trailing and livestock grazing under this alternative would reduce soil erosion problems caused by livestock. Soils would stabilize providing opportunities for plant growth. Reducing plant utilization would increase soil stability and reduce soil erosion. Management of wild horses under this alternative may improve soil stability especially at sites where wild horses may congregate within the corridors. Determining and managing for minimum instream flow needs would provide a tool for monitoring soils along the river corridors. Developing water quality monitoring would provide protective measures for soils by preventing or reducing potential soil contamination. Soils can be adversely impacted by humans due to high use levels in concentrated areas. The level at which human impact becomes detrimental is not known. Using the LAC process to develop criteria to monitor soil conditions would allow for protective measures to be implemented prior to degradation. Dispersed hiking use may create some erosion	vegetation. In some areas, uncontrolled, dispersed use can create more impacts to soils than hardening a site and controlling use. Potential impacts from chemical toilet leakage through vandalism may occur. Allowing the Birch Creek water rights to lapse and the fields to deteriorate at Birch Creek Ranch would promote soil erosion because the fields are currently too degraded to naturally revegetate with desirable native, erosion reducing plants. By maintaining current livestock management, impacts to soils would continue and potentially increase. Compaction and erosion occurs at concentrated use sites creating impacts to water quality, vegetative growth and aesthetics. Soil disturbance and contamination would continue at the Three Forks cabin from uncontrolled use of this cow camp (a non-containerized toilet was constructed). Soils can be adversely impacted by human use due to high levels of use in concentrated areas. Although use limits would eventually be established and set, soils may receive degradation prior to implementation of this management action. It would not allow for protective measures on soil conditions where limiting the number of people is not enough. A "carrying capacity" to avoid impacts to soils has not been established. Unstable soils would continue to erode at Rome without appropriate development measures and landscaping. Erosion would continue around the trailers, toilets, boat ramp, and parking/compound areas. Minor impacts to soils would continue at Three Forks from dispersed but concentrated recreation use. With increases in use levels would come increases in impacts. Chemical toilet leakage may occur from vandalism potentially causing soil contamination.	Completely removing livestock from the river canyon (including elimination of trailing) would be a positive benefit to soils. Highly disturbed areas of concentrated use would be allowed to rehabilitate. Impacts to soils from livestock grazing and trailing would be eliminated. Any development activities or structure removal activities would disturb soils in localized areas and create potential for erosion. Soils can be adversely impacted by high levels of human use in concentrated areas. Carrying capacity limits without effective data would not provide adequate management to protect soils. Managing solid human waste along the river corridors would prevent soil contamination and erosion problems and reduce soil disturbance from digging latrines for disposal of solid human waste. Opening the Morrison site airstrip for public use would increase the potential for soil compaction and erosion problems. Significant road upgrade would reduce soil impacts by significantly stabilizing the road and reducing maintenance requirements. Closing the route north of the Morrison site with a locked gate would assist in reducing impacts to soils from vehicle travel. However, if an effective location cannot be used then off-road vehicle travel may increase due to determined motorists driving around gate. If easements are obtained on The-Hole-in-the-Ground and Black Rocks Roads, vehicle use would undoubtedly increase, thus increasing soil compaction and erosion problems now occurring along these infrequently maintained routes. Closing Bogus Creek Road would prevent soil compaction and loss due to vehicle use, but may increase erosion impacts from abandonment of the road. Boundary reductions would prevent protection of important soil resources along private and state

Affected Environment	Alternative A	Alternative B	Alternative C
SOIL (Cont.)	problems within the canyon. The level of erosion would parallel the level of human use which is expected, based upon previous use, to be low. Development activities at sites such as Birch Creek, Rome, Three Forks, and Anderson Crossing would disturb soils in localized areas. Within these development activities are soil stabilization measures to eliminate or reduce impacts presently occurring. Potential impacts to soils along the river corridor at Anderson Crossing may occur with increases in off road vehicle travel. Providing information and patrolling the site more frequently would assist in preventing potential impacts. Managing solid human waste along the river corridors would prevent soil contamination and erosion problems through eliminating deposition of solid human waste and digging of latrines. Increasing recreation opportunity information may create soil impacts. Increasing education efforts, patrols, scheduled maintenance, and use restrictions would assist in reducing this potential impact from increased use. Prohibiting motorized watercraft may provide a positive effect on bank stabilization. Restricting aircraft landings within the riv corridors would protect soils from disturb Restoring unauthorized airstrips would hel soils in these areas such as Deary Pasture. The proposed road work on Birch Creek Road would reduce or eliminate current soil erosion problems. Soils would be disturbed in areas along the road during stabilization and construction activities. The overall long term benefit would be positive. Closing the route north of the Morrison site to vehicle traffic would eliminate soil erosion at the river crossing and potential disturbance to soils at	Low use levels at Anderson Crossing would maintain minimal to no impacts at this site. Increases in use, especially inappropriate use such as off road vehicle travel would create increases in impacts to soil. This action would not provide education efforts to prevent inappropriate use. The potential for continued usage of outdated methods of solid human waste carry out would create impacts at land fills off site from the river. Increases in use brings increases in human waste and contamination of soils, if that waste is not properly carried-out and properly disposed. Minor short-term impacts would occur from continual road usage and maintenance. Erosion would continue at Potter's Cave caused by easy access for looters and vandals. Erosion problems are increasing as use increases on the Birch Creek Road and maintenance remains minimal. Adverse impacts to soils would occur. Impacts to soils along the river would continue with uncontrolled vehicle access fording the river and entering the Morrison site. This soil erosion in turn affects water quality.	lands within the river canyons.

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
SOIL (Cont.)	the Morrison site from uncontrolled off road vehicle travel.		
AIR	Temporary dust impacts to air quality may occur during facility and road development or maintenance activities. This impact is negligible.	No effect.	Minimal impacts may occur from jet boat use and increased vehicle use due tohigher public use levels from more facility development. Impacts would include increases in dust and fuel exhaust.
WATER	Management of scenic quality under VRM Class I may provide protective measures for water quality through restrictions on surface disturbing activities. Extending the mineral withdrawal for the Main Owyhee may have a positive effect on water quality by eliminating potential mining activities that may create water quality impacts.	Short-term impacts could be expected from increased use in the form of waste, trash, and erosion potential from launching and landing boats and the trampling of streamside vegetation at Birch Creek Ranch. If water rights at Brich Creek Ranch are not exercised within a five yea period, by State water	Water resources impacts from Birch Creek Ranch management options: During removal of structuires increases in sediment loading would impact the Owyhee River. Site degradation and erosion would continue to add sediments to the river.

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
AIR	Temporary dust impacts to air quality may occur during facility and road development or maintenance activities. This impact is negligible.	No effect.	Minimal impacts may occur from jet boat use and increased vehicle use due to higher public use levels from more facility development. Impacts would include increases in dust and fuel exhaust.
WATER	Management of scenic quality under VRM Class I may provide protective measures for water quality through restrictions on surface disturbing activities. Extending the mineral withdrawal for the Main Owyhee may have a positive effect on water quality by eliminating potential mining activities that may create water quality impacts.	Short-term impacts could be expected from increased use in the form of waste, trash, and erosion potential from launching and landing boats and the trampling of streamside vegetation at Birch Creek Ranch. If water rights at Birch Creek Ranch are not exercised within a five year period, by State water law, the BLM would no longer hold valid water rights at this site. Potential impacts may occur if these fields become barren soil subject to erosion, creating sedimentation problems within the river.	Water resource impacts from Birch Creek Ranch management options: • During removal of structures increases in sediment loading would impact the Owyhee River. Site degradation and erosion would continue to add sediments to the river.
WATER (Cont.)	Short-term impacts to the water resource at Birch Creek Ranch could be expected from increased use in the form of trash and erosion potential from launching and landing boats, and trampling of streamside vegetation. Management measures taken for riparian and adjacent upland vegetation would benefit water quality by reducing livestock impacts at localized sites within the river corridors. Since livestock grazing is considered to be one of the contributing elements impacting water quality within the Owyhee Basin, managing livestock grazing and trailing would have a positive benefit to the river corridors' water resource. This alternative identifies the critical need for state and federal cooperation to determine and establish minimum flow requirements for the river corridors. Managing for and maintaining minimum flow requirements would be crucial for protecting ORVs. Increasing BLM's current effort on water quality monitoring by developing and implementing a multiple agency (state and federal) water quality and quantity monitoring plan for the Owyhee River	Maintaining existing livestock management would keep impacts to water quality at present levels with riparian conditions remaining constant or static at the sites receiving high use. It provides potential for decreases in water quality due to high concentrations of livestock grazing in small areas of the river canyons. Not determining and managing for minimum instream flow needs would be contrary to effective water resource management of these wild and scenic rivers. Water flows are key to each river's outstandingly remarkable values. This action would prevent protective management of the ORVs. Present staffing and funding does not provide a high priority for management of water quality on the Owyhee Wild River System. Although this alternative recognizes a need to eventually establish use limits, it does not account for conditions where a limit on the number of people may not provide the needed protection. Due	would potentially bring increases in micro-site degradation. Water quality would decrease from human waste and trash accumulation. • Developing the site into a high public use area would allow for increases in water quality degradation and eroded and compacted micro-sites. • The BLM would have to relinquish the water right on the Birch Creek field. Erosion from unstable soils and weed infestation would increase sediments in the river. Riparian vegetation and water quality would improve from exclusion of livestock. Setting use limits on one stretch of the Owyhee River with limited data may not provide adequate protection of the rivers' environment. Developing springs or providing water caches would require the BLM to test, sign and certify these sites as safe for drinking. This would be a major commitment of time and funds for what is suppose to be wild river management. Developing Rome into a rest stop would increase existing minor impacts, but impacts would not be

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
WATER (Cont.)	System would benefit the water resource of this wild river system. Use of the LAC process would be a benefit to water resources by providing protective criteria for monitoring water quality. This process would assist in managing for short term impacts at areas of high concentration such as campsites where increases in compaction, erosion, human waste, and trash can play a role in decreasing water quality. Restricting development activities (springs, water caches, trails) in order to protect primitive type recreation opportunities would be a positive benefit to water resources. Increased patrols and scheduled maintenance of campsites and trails would assist in protecting water quality. Development activities at Rome, Three Forks, and Anderson Crossing may create short term impacts to water quality. However, these improvements would help control use thus reducing impacts from human feces, toilet paper field, fire pits, etc. Developing a permanent facility at Rome may provide for increased use thus requiring more water from the well system. Increasing recreation opportunity information may increase use which may increase erosion, impacting water quality. However, increased education efforts, patrols, scheduled maitenance, and monitoring would prevent or reduce these impacts. Prohibiting motorized water craft would provide a positive benefit to water resources by eliminating potential impacts from increased turbidity, sediment loading, and pollutants. Providing minimal upgrade of Birch Creek Road within the current alignment to a level requiring less frequent maintenance would decrease erosional factors while providing increased water quality.	to present drought conditions and low use levels the only impacts that are occurring are minor ones on the lower Owyhee that can be easily mitigated or reversed. During "normal" water years, impacts occur in areas of concentration (camp sites, stream channel bars, overlooks, etc.) as compacted or eroded micro-sites, increased human waste and trash and minor decreases in water quality. Any motor use would present the possibility of minor pollution impacts to river water quality. Potential adverse impacts in the form of sediments, increase litter, increased human waste and more eroded and compacted sites may occur from uncontrolled use at Three Forks as use level increase. Leakage from the chemical toilet would be a high probability due to the vandalism potential (the toilet has had numerous rifle blasts through it). Potential short-term impacts to the water resource may occur at Anderson Crossing from increased human use. Impacts would be from vehicle use through and along the river, as well as increased levels of litter, improperly disposed of solid human waste, and soil compaction and erosion. Impacts from uncontrolled/unmanaged solid human waste disposal would increase with increased use levels along the river corridors degrading water quality and presenting health risks. Sediment and erosion problems are increasing as use of the Birch Creek Road increases. Significant impacts to the water resource of the Owyhee would occur from erosion if higher levels of use occur. Uncontrolled vehicle access from the north through the river and into the Morrison site brings short-term impacts to water quality in the form of sediment, oil and gas leakage, etc. Short-term impacts would occur in the form of increased sediments from continual road usage and maintenance.	significant. Development and increases in use at Anderson Crossing would allow for increases in sediments and turbidity and decreases in water quality in the small stream channel of the West Little Owyhee River. ıy ınage ınl ease er ı alte Developing a new launch facility downstream of Rome would increase impacts such as sediment loading and turbidity in minor amounts to the river. Installing a locked gate on the road north of the Morrison site would eliminate most of the impacts to the stream system. Significant upgrade of the Birch Creek Road would provide the least impact to water resources over the long term if the road is developed and maintained properly. This is due to the reduced maintenance requirements from upgrading. Not acquiring lands within the river corridors may not allow potential improved management to occur, limiting the BLM's management objectives. Reducing the boundaries of the North Fork and West Little Owyhee Rivers would not benefit the water resources as well as does the proposed action.

Affected Environment	Alternative A	Alternative B	Alternative C
	Negligible short-term sedimentation impacts would still exist from road usage and maintenance. Closing off access through the river corridor at the Morrison site would eliminate impacts to the stream system. Water quality would benefit. The BLM Hydrologist would need to evaluate each land acquisition before an impact assessment could be made. The administrative boundaries under this alternative would be a positive benefit to water resources by incorporating important canyonlands and side drainages. The boundaries would protect the water resource from impoundment and diversion.	A BLM Hydrologist and/or Water Rights Specialist would need to evaluate each land acquisition on the Owyhee River before making an impact assessment. Not managing for land acquisitions along the West Little or North Fork Owyhee Rivers eliminates the potential for improved management to occur along these river corridors, limiting the BLM's management objectives. Preliminary boundaries on the West Little and North Fork Owyhee Rivers would not provide as much management protection of the rivers' water resource as final, designated boundaries. This action is inconsistent with the Act.	
WILD HORSES	Possible reductions in wild horse numbers or development of alternate water sources would have a positive effect overall on wild horses. A thriving ecological balance would be maintained and more water sources would be available.	Minor negative impacts to wild horses would continue as access areas or water gaps to the river would continue to be grazed heavily by livestock. Since wild horses generally avoid the river corridor when water is available elsewhere, all actions continuing in the river corridor would have minor effects on wild horses.	Removing livestock from the river canyons would require fencing which could cause the horses to concentrate and restrict movement to water sources. Sand Springs is the area of concern for wild horses. Fencing off the river canyon in this area may restrict horse migration routes and cause scars or fatal wounds if horses run into these fences. These impacts would be minor in normal years when wild horse dependance on the river for water is low. During drought years, fencing could have a major impact.
GRAZING	Protection and enhancement measures for vegetation and scenic quality would impact grazing through changes in grazing practices and seasons, and through reductions or restrictions. Impacts to grazing operations may be expected such as increased responsibility riding and rounding up or reductions of grazing use within the river corridors. Protection and enhancement of cultural values may effect livestock grazing by restricting or reducing grazing use at localized sites. Restrictions may include exclusion fences.	Impacts to BLM's grazing management program would continue. Use supervision would be heavily impacted due to the need for increased monitoring. Increases in trespass cases may occur. Ranchers would continue to have difficulty in retrieving their cattle from the steep river corridors. Other impacts include livestock weight loss and stray livestock. Increases in human use may increase recreation/livestock conflicts. Conflicts between	Completely removing livestock from the river canyons (grazing and trailing) would create several impacts to the current grazing systems being implemented according to the land use plan: 1) Allotment boundaries are the middle of the rivers and would have to be changed, thus eliminating portions of pastures. 2) Entire pastures may be eliminated if rim gap fencing cannot prevent livestock grazing within canyons. This could cause reductions in AUMs.

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
GRAZING (Cont.)	Protection and enhancement of wildlife values may effect livestock grazing by restricting or reducing grazing use in wildlife/livestock conflict areas. Management of livestock grazing under this alternative would create several impacts to grazing management. The increase in management would increase the amount of operator responsibility and accountability in making sure compliance with management strategies are met. Resistance to changes in management would be expected as some operators do not accept changing practices that have been done for years. Reducing livestock dependance on the river for water would reduce stress on the animals from travelling over difficult terrain. This would provide a positive benefit to livestock operators by eliminating livestock weight loss from steep canyon travel. It would also ease livestock operators' management of their stock by eliminating difficult round-ups in the canyons. Enforcing the livestock trailing stipulations would require more use supervision by livestock operators and BLM range staff. In addition, compliance with trailing stipulations would increase responsibility and accountability of grazing operators. Operators would have to make sure that their trailing practices comply with BLM stipulations and that ORVs are protected. Positive benefits would include more effective grazing management and enforceable use supervision. Authorizing use of the Three forks cabin would improve grazing management through documenting and stipulating appropriate use. Increases in recreation use may increase recreation/livestock conflicts. Increased education efforts and recreation use supervision would provide users with more information on livestock operations and may help to lessen conflicts.	ranchers and recreationists would probably continue. Positive benefits in the lower stretches of the main Owyhee would continue. Current grazing systems designed to improve riparian conditions are meeting that objective.	3) The ability to move livestock across the river between allotments would be eliminated. Permittees may have to transport livestock by truck over many miles of rough roads, increasing operating expenses. Impacts to livestock operations could be major as operators would be forced to find alternate water sources. In some cases, hauling water or developing wells would be the most logical options, both of which would increase operating expenses. Removal of the Three Forks structures or management of the structures for recreation only would cause impact to a grazing operation. The permittee would have to pack portable camping facilities to a new site with the potential of disturbing soil and vegetation at this new site. Increases in recreation use may increase recreation and livestock conflicts. A constructed hiking trail would increase livestock accessibility to the river corridors. This could lead to overuse of riparian areas and significant problems to grazing management. This may be able to be mitigated through use of gate/turnstile systems at the end and beginning of the trails.

Affected Environment	Alternative A	Alternative B	Alternative C
	Development of a CMA with DSL would provide more effective grazing management within the wild river corridors. This would benefit BLM, DSL and the livestock operators by reducing or eliminating conflicts over use, use supervision, and trailing and trespass.		
RECREATION	Measures designed to protect and enhance scenic quality would benefit opportunities for primitive type recreation activities. Visitors would have a more natural setting in which to enjoy the wild river corridors. Extending the mineral withdrawal for the Main Owyhee would protect primitive type recreation activities from surface disturbance and development from potential mining activities.	Acquisition of important resource lands may enhance primitive recreation opportunities. The proposed boundaries would provide protective management of the outstanding scenery and other natural resources within these river corridors which results in enhancement of the recreation ORV.	Impacts to the recreation resource from Birch Creek Ranch management options include: • Loss of important recreation opportunities from removal of all structures in this area. Important interpretation messages of significant historic resources would be lost. Reductions in wildlife habitat diversity would eventually occur, limiting wildlife viewing opportunities. The scenic historic landscape would be lost for viewing opportunities.
RECREATION (Cont.)	The management option for the Historic Birch Creek Ranch would provide a unique opportunity to recreationists. The diversity of recreation activities at this site would be a positive benefit to recreation management in the **river** corridor. Limiting public use of the area reduces its recreational opportunities, but protects primitive type recreation values and cultural, scenic, and wildlife values. Cultural management under this alternative may restrict or prohibit recreation use at significant cultural sites. Cultural resource interpretation would provide visitors a positive benefit to their river experience through increased education/information of the area. Measures used to protect and enhance fish and wildlife may limit or restrict recreation use. If vegetative rehabilitation work is necessary, recreation use may be limited or prohibited in the work area. If necessary, areas of special status species may be closed to recreation use. Livestock use and gathering and trailing management would enhance recreation in the	Opportunities for a primitive type, natural wild river setting may be reduced due to historical and current visual resource management. Current management guidelines for the Birch Creek Ranch would continue thus maintaining current recreation opportunities. Recreation opportunities at the lower site would be lost. Impacts and conflicts from current livestock grazing practices would continue to affect recreation activities. Scenic value, recreation experiences, and avialable campsites would continue to be reduced/impaired. Impacts to outstanding water-based recreation values would occur by not managing for instream flow requirements. Recreation use limits would eventually be set through this carrying capacity action and would reduce visitor use opportunities. This action would allow existing impacts to continue and could potentially degrade qualities of primitive recreation activities. No increases in visitor services such as an improved Rome Launch Site, a new rest stop, a primitive recreation site at Three Forks, bulletin boards, and	• Management of the facility by a concessionaire would provide for increases in visitor use. Facilities would be available for rent by the general public. Impacts from conflicts between visitors performing different recreation activities may occur. Float-boating visitors floating through the area may receive impacts on their solitude and wild river experience. • Development of the area into a high use facility would provide for more visitor use opportunities. Conflicts may arise between visitors engaging in primitive type recreation and those of more general recreation activities. Completely removing livestock from the river canyons would enhance the recreation values of the rivers. Scenic values in the localized impacted areas would be restored overtime. Campsites would be free of cattle impacts. Removing the structures at Three Forks would eliminate opportunities for interpretation of the area's history. Use of the cabin for shelter would also be lost.

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
	localized areas currently receiving impacts from livestock. Conflicts between livestock grazing and recreation would be reduced. Managing instream flow requirements and protecting water quality to maintain outstanding primitive recreation opportunities would provide protection of this outstandingly remarkable recreation value. Use of the LAC process in determining desired resource and social conditions would help protect the river's natural qualities and provide outstanding primitive recreation opportunities. However, the potential for use limits or restrictions to protect natural and cultural values would reduce recreationists' opportunities to use these river canyons.	brochures would limit recreation opportunities in these river corridors. Impacts to natural and cultural resources and primitive type recreation opportunities would continue without appropriate facilities and educational materials. Denial of access by landowners along designated access routes prevents visitor use of the rivers. Access concerns and conflicts would continue.	Maintaining the cabin at Three Forks for public use would enhance the recreation resource in this area. The rancher's loss of this facility to public use may increase conflicts between livestock operators and backcountry recreationists. Although inconsistent with current DOI policy, Federal Reserved Water Right would provide protection measures for river-related resources and recreation activities. Continuing nonpoint source problems may lead to decreases in water quality affecting water-based recreation. Arbitrary use limits would restrict each river's recreation potential by limiting use that may not be necessary. Current data, especially on the West Little and North Fork Owyhee Rivers, is not adequate to set effective use limits. Limitations and regulations would place restrictions on visitors' freedom. Three Forks would continue to receive minor resource impacts which would accumulate and reduce the scenic quality and outstanding primitive type recreation resource of the area. Developing the Rome site into a rest stop would provide needed services to the traveling public, but it would also create conflicts between river users and the traveling public in this small facility until a new launch site could be developed. Opening the airstrip at the Morrison site would increase opportunities for recreation. However, this increased use would reduce opportunities for solitude and primitive types of recreation. Significantly upgrading an access route provides opportunities for more visitors. Opportunities for primitive types of recreation are reduced while developed recreation is enhanced. Closing an access route reduces recreation
RECREATION (Cont.)	Maintaining the Vale District as administrator of commercial permits for the entire Oywhee, across three states, provides the most effective and effecient way to process permits and monitor compliance, since the other two districts do not currently have river ranger programs. Restricting development such as trails, water caches, and spring would maintains the primitive recreation opportunities for which the river was designated. Increased patrols and scheduled maintenance of campsites and trails would have a positive effect on primitive recreation opportunities by preventing or reducing impacts that may impair primitve recreation values. The bulletin board and possible signing and barriers at Anderson Crossing would reduce impacts to recreation values by providing information and controls. Recreation at Three Forks would be enhanced through minimal, primitive type facility development. The toilet and camping sites would reduce the build-up of trash, solid human waste and rock fire-rings. Conflicts between types of		

Affected Environment	Alternative A	Alternative B	Alternative C
RECREATION (Cont.)	recreation visitors would be reduced by these management options. Positive benefits would be gained through development of a permanent visitor and ranger station at Rome. More visitor services would be provided. Visitor contacts could be made year-round to provide important education information on the area. A rest stop along Highway 95 would provide needed services to the traveling public and reduce minor impacts and conflicts occurring at Rome. Providing more education and interpretation to visitors and working with local landowners around Rome would enhance the recreation experience of the river corridors and reduce conflicts with visitors and landowners. Increased recreation opportunity information may increase visitation displacing some visitors. Improving education, information, and coordination with the Sheriff's Departments would improve resource protection and visitor safety thus enhancing recreation values. Many of these management actions would require visitors to be more sensitive to natural and cultural resources. Freedom would be limited by actions such as solid human waste and campfire management, motorized watercraft use prohibitions, possible use limits, and others. However, the main objective is to provide outstanding primitive-type recreation opportunities while protecting the natural and cultural values of these river canyons. Prohibiting motorized watercraft use on the river system would limit commercial outfitters ability to use sweep boats for commercial trips. Not allowing aircraft landings on public land would prevent that type of recreation access. However, this action would enhance the primitive recreation		opportunities for the general recreation public while enhancing backcountry, primitive type recreation experiences. Developing a hiking trail would increase the types of recreation opportunities available in the river corridors. It would enhance use for those with physical limitations. A constructed trail would also reduce the primitiveness of the areas recreation potential. Not acquiring private or state lands within the river corridors may eliminate protection of important resource values. Important recreation opportunities may be lost. Reducing boundaries on the West Little and North Fork Owyhee Rivers would reduce protective management on the important scenic and other natural resources that enhance the recreation resource of these rivers. Outstandingly remarkable recreation values would be lost.

ENVIRONMENTAL CONSEQUENCES

Affected Environment		Alternative B	Alternative C
RECRECATION (Cont.)	activities and opportunities for solitude. Improving Birch Creek Road access would provide safer, reasonable public vehicle access while still maintaining the primitive type recreation opportunities in the area. The road closure north of the Morrison Ranch eliminates approximately 2 miles of road from vehicle access which would negatively effect vehicle-bound recreationists. Controlling access through designations would assist in perserving the primitive recreation value. Scheduled road maintenance would help protect resources through reduced erosion and route proliferation, thus protecting the primitive recreation setting and providing vehicle access to the river corridor. Cooperative management with DSL may help in protecting the primitive recreation setting from potential surface disturbing actions. Revocation of BR and FERC withdrawals would benefit the recreation resource by consolidating administration and reducing management conflicts. Acquisition of private and state lands may protect the recreation ORV from surface disturbance from potential development.		
WSAs	Management strategies under this alternative would provide for protection of wilderness values (naturalness, outstanding opportunities for solitude or primitive recreation, and special features). Naturalness of the WSAs would improve through reduced impacts to the vegetative resource as a result of the proposed intensive management of livestock grazing and trailing. Major recreation related development would be	Any increase in impacts may have the potential of impairing the WSAs suitability for wilderness designation. For example if levels of human and livestock impacts increase without control measures then naturalness, outstanding opportunities for solitude or primitive types of recreation and special features of the WSAs may be adversely impacted. Not determining and managing for minimum instream flows would impact the wilderness resources of these rivers.	Through development and increases in use comes the potential for impacts to wilderness values. Outstanding opportunities for solitude and primitive types of recreation may be limited. Removing livestock from the river canyon completely would enhance the naturalness of those areas receiving impacts. Fences would create "imprints of man" on the wilderness values. The installation of fences to exclude livestock would be consistent with BLM's IMP for areas under

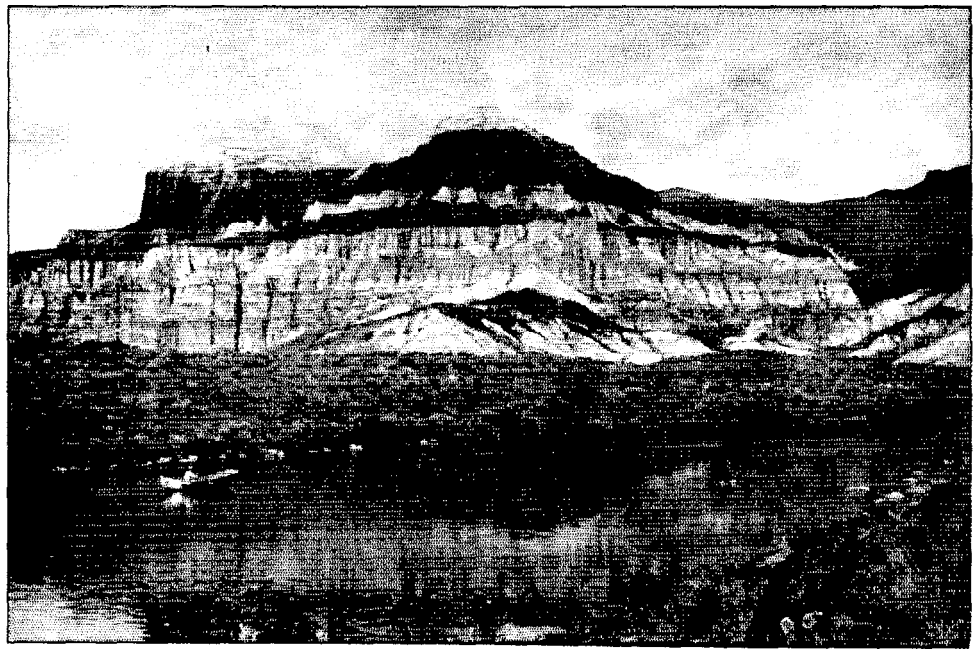
Affected Environment	Alternative A	Alternative B	Alternative C
WSAs (Cont.)	outside the WSAs. Some recreation developments may occur within the WSA (signs, bulletin board, barriers), but WSA values would not be impaired. Some livestock-related projects (fencing and water development) may occur within WSAs, but impacts would not be allowed to be impairing. Overall benefits would be positive to wilderness values by controlling uses and reducing or eliminating impacts. Use of the Limits of Acceptable Change process (LAC) would be a positive benefit to wilderness management Wilderness management plans, required when an area is designated wilderness, would incorporate the LAC process. Increased visitation may occur within WSAs, but increased river patrols, visitor contacts, and information would assist in controlling any additional impacts. Prohibiting motorized watercraft use and aircraft landings would be consistent with and enhance wilderness management. Revocation of FERC withdrawals and acquisition of private or state land inholdings within WSAs would enhance management if the areas are designated as wilderness.	Decreases in water quality would impact the areas' wilderness qualities.	wilderness review. Any development such as springs, water caches, or facilities at Anderson Crossing would have to meet IMP requirements. Naturalness would receive minor on-site impacts from this development. Upgrading the Birch Creek Road to 2-wheel drive, dual lane road would disturb soil and vegetation and degrade the areas naturalness. Constructing a hiking trail in WSAs would impact the naturalness of the WSAs. The use and impacts would be concentrated on the trail instead of creating dispersed trailing throughout the WSAs. Acquiring all private parcels in priority order would provide for better manageability of WSAs and potential designated wilderness areas.
ACEC	Management would provide for protection of the river environment for which the ACEC was designated. This river plan would provide management direction in lieu of an ACEC management plan.	Many of the no action options would not protect the river resource for which the ACEC was established. ACEC designation requires BLM to provide protective management.	This alternative allows for more development and higher use levels and may not provide needed special management required by the ACEC designation.
AGRICULTURE	No effect.	No effect.	No effect.
MINERALS	All lands within one-quarter mile of the mean high water land on both sides of the rivers have been withdrawn from mineral entry. No mining can take place within this area due to the classification of	All lands within one-quarter mile of the mean high water line on both sides of the rivers have been withdrawn from mineral entry. No new mining can take place within this area due to the classification	All lands within one-quarter mile of the mean high water line on both sides of the rivers have been withdrawn from mineral entry. No new mining can take place within this area due to the classification

ENVIRONMENTAL CONSEQUENCES

Affected Environment	Alternative A	Alternative B	Alternative C
	these rivers as "wild" under the National Wild and Scenic Rivers Act. Mining activities outside of the one-quarter mile boundary would be regulated under applicable mining laws and policies.	of these rivers as "wild" under the National Wild and Scenic Rivers Act.	of these rivers as wild under the National Wild and Scenic Rivers Act.
ENERGY	Rome launch site is located within a proposed utility corridor. Expansion of the Rome facility may impact the location of the proposed utility corridor. Acquiring private land within the river corridor could hinder a utility corridor designation by closing a window area. The Utility Industry would prefer to work with private land owners. No acquisition is proposed within the nondesignated, Rome Valley, section.	No effect.	No effect.
WITHDRAWALS	The Wild and Scenic Rivers Act prohibits power and water development on existing withdrawn lands within the river boundaries. No new water power withdrawals would be allowed. Minimum flow needs to protect ORV's and acquisition of state water rights would impact future hydro-potential. The proposed action requires revocation of all withdrawals within each river corridor. Since these lands cannot be used for their withdrawn use (energy and water developments) revocation of the withdrawals to BLM would provide a positive benefit to all agencies involved. Bureau of Reclamation and Federal Energy Regulatory Commission would not be encumbered with management of lands that no longer provide the intent of the original withdrawal. BLM would be able to more effectively manage the river corridors because of the more contiguous land patterns.	The Wild and Scenic Rivers Act prohibits power and water development on existing withdrawn lands within the river boundaries (preliminary and designated). No new withdrawals will be allowed under this Act.	The National Wild and Scenic Rivers Act prohibits power and water development on existing withdrawn lands within the river boundaries (preliminary and designated). No new withdrawals will be allowed under this Act. Developing cooperative management agreements (CMA) with Bureau of Reclamation and Federal Power Commission would allow for better management jurisdiction of the wild river corridors where withdrawals exist. The Act gives other agencies with withdrawn lands within designated corridors the authorization to turn over their jurisdiction of the withdrawn lands to the managing agency to provide for better resource management. However, a CMA would not provide effective management like total revocation.
LAND ACQUISITION	A CMA with DSL may assist BLM on acquiring scenic easements on DSL lands or pursuing land exchanges.	Continuing with the Owyhee River acquisition plan would provide protective measures for the Owyhee. Resource-sensitive parcels along the West Little and	Easements would be required if spring development or water caches are on private or state lands.

Appendices

A. Planning Participants
B. Law, Policy, References
C. Glossary
D. Related Federal, State, and Local Management Responsibilities
E. Oregon State Scenic Waterway program
F. Memorandum of Understanding between BLM, OSPD, and USFS
G. Land Acquisition Parcels
H. Recreation Opportunity Spectrum, Limits of Acceptable Change, and Visual Resource Management
I. Legal Descriptions of Administrative Boundaries
J. Maps



Appendix A

Planning Participants/Consultation and Coordination

BLM Management Participation

Jim May - District Manager, Vale
Geoff Middaugh - Associate District Manager, Vale
Dave Atkins - Area Manager, Jordan Resource Area (JRA), Vale (to 1/92)
Rich Conrad - Acting Area Manager, JRA, Vale (2/92-6/92)
Jerry Taylor - Area Manager, JRA, Vale (6/92 to present)
Ralph Heft - Area Manager, Malheur Resource Area, Vale
Donna Webb - Assistant District Manager, Resources, Vale

BLM Staff Participation

Robert Alward - Outdoor Recreation Planner
Alice Bronsdon - Cultural Resource Specialist
Claire Button - District Botantist
Mike Castro-Shrader - Law Enforcement Ranger
Steve Christensen - Range Conservationist
Rod Coleman - Wild Horse Specialist
Rich Conrad - District Outdoor Recreation Planner
Randy Eyre - Range Conservationist
Jean Findley - District Botanist
Lynne Forre - Resource Assistant
Tom Forre - Range Conservationist/Ecologist
Brent Grasty - Water Rights Specialist
Gary Guymon - Range Conservationist
Cliff Harvey - Recreation Technician
Bill Holsheimer - District Geologist
Bonnie Jakubos - Wildlife Biologist
Robert Kindschy - Wildlife Biologist
Rich Law - River Ranger
Jim Ledger - Reality Specialist
Tom Miles - Supervisory Range Conservationist
Cliff Page - Range Technician/Weed Specialist
Vern Pritchard - District Engineer
Charlene Rogers - Range Conservationist
Phil Rumpel - District Range Conservationist
Sheldon Saxton - Realty Specialist
John Shipp - River Ranger
Jack Wenderoth - District Hydrologist
Ken White - State Office Outdoor Recreation Planner
Cathi Wilbanks - Outdoor Recreation Planner, Plan Lead
Jeff Wilbanks - River Manager and Planning and Environmental Coordinator

Key Planning Group

Melinda Allan - River enthusiast, noncommercial
Bruce Anderson - River enthusiast, noncommercial

Jim Anderson - Rancher, Land owner
Wayne Bowers - Fishery Biologist, Oregon Department Fish and Wildlife
John Bennedict - Outdoor Recreation Planner, Owyhee R.A., Boise BLM
Alice Elshoff - Oregon Natural Desert Association
John Garren - National Organization for River Sports
Ken Haylett - River shuttles, commercial
Ken Helfrich - Commercial outfitter, Oregon Guides and Packers Rep.
Ray Huff - Malheur County Planning
Jerry Hughes - River enthusiast, commercial outfitter
Wes and Ilea Jones - Local public land user (recreation)
Tim Lequerica - Rancher, Land owner
John Lilly - Oregon Division of State Lands, Salem
Burton Lewis - Oregon Division of State Lands, Bend
Duncan MacKenzie - Rancher, Land owner
Laz Mendieta - Rancher, Land owner
E. Charles Meslow - River enthusiast
Gary Miniszewski - River Planner, Oregon State Parks and Recreation Dept.
Bill Olsen - Wildlife Biologist, Oregon Department Fish and Wildlife
Oregon Natural Resources Council
Oregon Rivers Council
Mike Quigley - Northwest Rafters Association
Lolla Sept - Bureau of Reclamation, Boise, Idaho
Wayne Shuyller - Oregon State Marine Board
Joe Walicki - Sierra Club Rep.
Michelle Wilson - Wilderness Society Rep.

Other Consultation & Coordination

Bill Fujii - Oregon Water Resources Department
Ray Perkins - Oregon Department of Fish and Wildlife
Chris Bengoa - Lucky Seven Ranch
Kimball Wilkinson - Wilkinson Ranches
John Beal - Malheur County Planning
Gerry Meyer - Outdoor Recreation Planner, Baker Resource Area, Oregon
Steve Jakubowics - Bureau of Reclamation, Boise, Idaho

Appendix B

Laws, Regulations and Other References

- Wild and Scenic Rivers Act P.L. 90-542 (1968), as amended.
- Federal Land Policy and Management Act (FLPMA), P.L. 94-579, October 1976.
- Endangered Species Act, 1973.
- Archaeological Resources Protection Act, 1979.
- National Historic Preservation Act, 1966.
- Taylor Grazing Act, 1934
- Clean Water Act, 1979
- The Federal Fish and Wildlife Coordination Act, 1958.
- The Wilderness Act, P.L. 88-577, 1964.
- The National Environmental Protection Act, 1969.
- Interim Management Policy and Guidelines for Lands Under Wilderness Review, Bureau of Land Management, 1979, as amended
- Oregon State Scenic Waterways Act, ORS 390.805 to 390.925, 1970.
- Oregon Administrative Rules, Chapter 736, Division 40 - State Department of Parks and Recreation.
- The Wild Horse and Burro Act, 1971.
- Owyhee Wild and Scenic River Study Final Report - Environmental Impact Statement, National Park Service, 1979.
- Southern and Northern Malheur Resource Area Management Framework Plans, BLM, Vale District, 1983.
- Southern Malheur Grazing Management Program Environmental Impact Statement, BLM, Vale District, 1983.
- Southern Malheur Rangeland Program Summary, BLM, Vale District, 1984.
- Oregon State Comprehensive Outdoor Recreation Plan (SCORP).
- Malheur County Comprehensive Land Use Plan and Ordinances.
- Owyhee Canyonlands Wilderness Environmental Impact Statement, BLM, Boise District, Idaho, 1985.
- National Wild River Management Plan - Owyhee River, Final, BLM, Vale District, 1986.

- Oregon Wilderness Final Environmental Impact Statement, BLM, Oregon, 1989.
- Oregon Statewide Assessment of Nonpoint Sources of Water Pollution, Oregon Department of Environmental Quality, Water Quality Division, Portland, Oregon, 1988.
- Water Resources Data, Oregon, Water Year 1990, Volume 1, USGS Water Data Report OR-90-1, USGS, Water Resources Division, Portland, Oregon, 1991
- West Little Owyhee National Wild River Resource Assessment, BLM, Vale District, 1991.
- North Fork Owyhee National Wild River Resource Assessment, BLM, Vale District, 1991.
- Final Eastern Oregon Scenic Waterways Flow Assessment, Grande Ronde River, Wallowa River, Minam River, Owyhee River; Oregon Water Resources Department, Salem, Oregon: December 1991.

Appendix C

Glossary

Access - The ability of recreationists to reach the areas in which they wish to recreate.

Allotment - An area of land where one or more livestock operators graze their livestock.

Alternative - A comprehensive management strategy; when a federal agency is considering an action, NEPA requires the agency to develop and analyze a range of reasonable alternatives, including a "no action" or "no change" alternative. The alternatives must respond to the issues, and must show a reasonable range of actions.

Aquatic - Living or growing in or on the water.

Archaeological Site - Geographic locale containing structures, artifacts, material remains and/or other evidence of past human activity.

Biodiversity - The relative abundance and variety of species, both plant and animal, in a given area.

Campground - One or more developed campsites in a specific area.

Campsite - Individual unit for camping.

Campsite Rehabilitation - Measures taken to restore damaged campsites to prevent further damage to natural resources.

Class III Cultural Resource Survey - A professionally conducted, continuous, intensive survey of an entire target area aimed at locating and recording all cultural properties that have surface and exposed profile indications.

Compaction - The process of packing firmly and closely together; the state of being so packed, (ie. compaction of soil from intense human or livestock use or vehicular activity). Soil compaction results from particles being pressed together so that the volume of soil is reduced. It is influenced by the physical properties of the soil, moisture content, and the type and amount of compactive effort.

Crucial Wildlife Habitat - Parts of the habitat needed to sustain a wildlife population at critical periods of its life cycle. This is often a limiting factor on populations, such as breeding habitat and winter habitat.

Cultural Resources - Remains of human (historical and archaeological) activity, occupation, or endeavor, reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture and natural features that were of importance in past human events. Cultural resources consist of: (1) physical remains; (2) areas where significant human events occurred, even though evidence of the events no longer remains; and (3) the environment immediately surrounding the actual resource.

Cumulative Effects - Effects on the environment resulting from actions that are individually minor, but that add up to a greater total effect as they take place over a period of time.

Desired Future Condition - A vision of the desired future state of a specific area. Desired future condition gives managers goals for the area, but recognizes the dynamic state of the ecosystem, instead of listing numerical outputs as goals.

Developed Campground - Accessible by motor vehicle and contains improvements for camper and comfort and sanitary facilities such as toilets, drinking water, tables and trash receptacles.

Ecosystem - An interacting system of living organisms considered together with their environment; examples include talus ecosystems or river ecosystems.

Endangered Species - A plant or animal species whose prospects for survival or reproduction are in immediate danger as designated by the Secretary of the Interior and as further defined by the Endangered Species Act of 1973, as amended.

Environmental Assessment - A concise public document that evaluates a proposal for the possibility of significant environmental impacts; the analysis is required by NEPA laws. An environmental assessment results in either a Finding of No Significant Impact (FONSI) and decision notice; or, if impacts will be significant, the agency must then go on to prepare an environmental impact statement.

Erosion - Detachment and movement of soil or rock fragments by water, wind, ice or gravity.

Fecal Coliform - A bacteria found in the human colon; a fecal coliform count is used as an indicator of fecal contamination, if any, in water.

FONSI - Finding of No Significant Impact. Required by NEPA when a federal agency prepares an environmental assessment; documents the reasons why the impacts of the proposed action are not significant, and therefore, the agency is not preparing an environmental impact statement.

Forage - All browse and herbaceous plants that are available to grazing animals including wildlife and domestic livestock.

Ground Cover - Grasses or other plants that keep soil from being blown or washed away.

Guide - A person who provides services by leading one or more other persons in outdoor recreation activities for a fee.

Guide Permit - A license to carry out the activities of a guide.

Habitat - The area where a plant or animal lives and grows under natural conditions. Habitat consists of living and non-living attributes, and provides all requirements for food and shelter.

Historic Site - Locales used by immigrants from the 1820s to 1930s.

Impact - A change in the environment caused by the activities of humans.

Issue - A subject or question of widespread public discussion or interest regrading management of a geographic area which has been identified through public participation.

Launch Site - The riverbank location where boats are placed in or removed from the river.

Limits of Acceptable Change - A process for establishing acceptable and appropriate conditions 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 rate of change due to human factors within acceptable levels.

Management Objectives - Parameters or goals to be used as standards to measure the success of the management plan.

Management Plan - A plan guiding overall management of an area administered by a federal or state agency; plan usually includes objectives, goals, management actions, and monitoring plans.

Mitigation - Steps taken to avoid or minimize negative environmental impacts. Mitigations can include: Avoiding the impact by not taking a certain action; minimizing impacts by limiting the degree or magnitude of the action; rectifying the impact by repairing or restoring the affected environment; reducing the impact by protective steps required with the action; and, compensating for the impact by replacing or providing substitute resources.

Moderate Water Quality Problem - A stream or water quality problem which interferes with the desired uses of the water body and with the normal life history or composition of aquatic populations.

Monitoring - The orderly collection of data to evaluate the effects or changes that result from management actions.

Multiple Use - The harmonious use of land or water resources for more than one purpose.

National Register of Historic Places (NRHP) - The official list, established by the Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation.

National Environmental Policy Act - Commonly known as NEPA; became law in 1969. NEPA is the basic national charter for protection of the environment. The Act requires all federal agencies to consider and analyze all significant environmental impacts of any action proposed by those agencies; to inform and involve the public in the agency's decisionmaking process; and to consider the environmental impacts in the agency's decisionmaking process.

National Wild and Scenic Rivers System - A system of Congressionally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural and/or other values and are preserved in a free-flowing condition. The system is of three types: (1) Recreation—rivers or sections of rivers readily accessible by road or railroad that may have some development along their shorelines and that may have undergone some impoundment or diversions in the past; (2) Scenic—rivers or sections of rivers free of impoundments, with shorelines or watersheds still largely undeveloped but accessible in places by roads; and (3) Wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

Native Species - Plants or animals that are indigenous to an area.

Natural River Areas - Those State Scenic Waterways or segments thereof that are generally inaccessible except by trail or the river, with related adjacent lands and shorelines essentially primitive. These represent vestiges of primitive America. Natural River Areas may include an occasional lightly traveled road, airstrip, habitation or other kind of improvement already established, provided the effects are limited to the immediate vicinity. Natural River Areas will be administered to preserve their natural, wild and primitive condition, essentially unaltered by the effects of man, while allowing compatible recreational uses, other compatible existing uses and protection of fish and wildlife habitat.

Noncommercial - Activities in which there is a bona fide sharing of the cost of the activity between all participants.

Nonpoint source pollution - An activity, event, or structure creating a product or process which enters a waterbody by diffuse means and not through a pipe and causes a water quality or stream quality problem. Nonpoint sources include natural or human sources but are not limited to: farming of crops, livestock grazing, harvesting trees, building or road construction, mining floods, drought, water diversions, and city streets.

No-Trace Camping - The art of camping without leaving signs of use.

Noxious Weed - A plant specified by law as being especially undesirable, troublesome and difficult to control.

Observation Only - The act of visually observing a stream or water quality problem but without specific data being collected to prove the effect on beneficial uses of the water.

Off-Highway Vehicle (OHV) - Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding (1) any non-amphibious, registered motorboat; (2) emergency vehicles; and (3) vehicles in official use.

Outfitter - A person who for compensation or other gain, provides equipment, supplies or materials for the conduct of outdoor recreational activities.

Outstanding Remarkable Values - Term used in the National Wild and Scenic Rivers Act of 1968; to qualify as outstandingly remarkable, a resource value more be unique, rare, or exemplary feature that is significant at a regional or national level.

Permittee - One who holds a license to use public lands or waters for financial gain.

Plan Objectives - Guiding statements that present the purposes and overall intent of the planning effort.

Prehistoric - In the U. S., the period before European contact.

Public Lands - Any land and interest in land managed by the United States Government and administered by the Secretary of the Interior through the Bureau of Land Management.

Recreation Opportunity Spectrum - A framework for understanding and defining various classes of recreation environments, activities, and experiences. The classes are defined in terms of the opportunities to have different kinds of experiences; examples are "roaded natural" and semi-primitive.

Resource Assessment - An evaluation of the resources and values associated with a wild and scenic river and the river corridor; the evaluation determines the level of significance of river-related values.

Right-of-Way - A permit or easement which authorizes a specific use of a specific area of land.

Riparian Area - The land adjacent to water, where water, soil and vegetation interact to form a unique microclimate.

River Corridor - The wild & scenic corridor, including all areas that are part of the designation.

Scoping - The process by which significant issues relating to a proposal are identified. It includes eliciting public comment, evaluating concerns and developing issues and alternatives for consideration.

Sediment - Soil, rock particles and organic or other debris carried from one place to another by wind, water or gravity.

Sedimentation - A process where material carried in suspension by water flows into streams and rivers, increasing turbidity and eventually settling to the bottom.

Severe Water Quality Problem - A stream or water quality problem which causes substantial or nearly complete interference with the beneficial uses or opportunities to use the water.

Specific Data - Existing information or data derived through documentation of a specific stream or water quality condition such as a documented reduction in a given fish population resulting from a documented increased sediment load and the resultant silting of gravel bars. Specific data also refers to water quality data that demonstrates a trend towards degradation or water quality standards violation.

Thalweg - The main current or center of a stream where the highest velocity and deepest water flows.

Threatened Species - A plant or animal species the Secretary of Interior has determined to be endangered in the foreseeable future throughout all or most of its range.

Turbidity - A measure of water clarity.

Upland - All rangelands other than riparian or wetland areas.

Visual Resources management (VRM) - VRM has dual program purposes: To manage the quality of the visual environment, and to reduce the visual impact of development activities while maintaining the effectiveness of the management plan objectives. It is a specific process that can be mapped and incorporated into design planning for projects ranging from prescribed burning to campground development.

Water Quality - The chemical, physical and biological characteristics of water with respect to its suitability for a particular use.

Watershed - Lands which are enclosed by a continuous hydrologic drainage divide and located upslope from a specified point on a stream.

Wild and Scenic River - Those rivers or sections of rivers designated as Wild and Scenic by Congressional action, either under the 1968 Wild and Scenic Rivers Act, or under supplements and amendments to that act.

Wild Rivers - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Appendix D

Related Management Responsibilities/Intergovernmental Relationships

The Wild and Scenic Rivers Act requires that a comprehensive river management plan be prepared to provide for the protection of river values. Therefore, it is necessary to insure that all entities (federal, state and local) that play a role in management of these rivers are included in the planning process. Federal, state and local agency roles and responsibilities to river management are described below.

Bureau of Land Management

In 1983, The Bureau of Land Management completed Management Framework Plans (MFP) for the Southern and Northern Malheur Resource Areas. (Note: Southern Malheur is now called Jordan Resource Area and Northern Malheur is now Malheur Resource Area.) The MFPs are comprehensive land use plans for management of all BLM lands and minerals in Malheur County, Oregon. The plans established land use goals and objectives for Bureau administered lands, minerals, soils and watershed, rangeland, forest and woodlands, fish and wildlife habitats, recreation, cultural and archaeological resources. It incorporated management direction for roads and access, utility and transportation corridors, fire control, and noxious weed control. The plans include the Owyhee River system of which BLM manages 90% of the lands within the river system corridor. The plans were completed in 1983 prior to designation of any of the rivers as wild and scenic. However, the MFP recommended Wild and Scenic River designation for the Main Owyhee and special management considerations for this river.

Bureau of Reclamation

Originally, the Bureau of Reclamation (BR), under the Secretary of Interior, administered the reclamation program that would provide the arid and semiarid lands of the 17 contiguous Western States a secure, year-round water supply for irrigation. The Bureau of Reclamation now provides water for farms, towns, and industries, and is responsible for the generation of hydroelectric power, river regulation and flood control, outdoor recreation opportunities, and the enhancement and protection of fish and wildlife habitats. The BR is currently developing a management plan for their Owyhee Project which includes lands within the Owyhee Wild River. Their current management emphasis is irrigation and hydroelectric power. However, BR also manages leases for recreational purposes such as Owyhee State Park and public use cabins.

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission is an independent, five member commission within the Department of Energy which retained many of the functions of the Federal Power Commission (FPC). FERC power site withdrawals encompass the majority of the Main Owyhee River. A Memorandum of Understanding between BLM and FPC gives general guidance on management of power site withdrawals.

The Land Conservation and Development Commission

Oregon's statewide planning program is directed by the Land Conservation and Development Commission (LCDC). The commission's seven members are unsalaried volunteers, appointed by the governor and confirmed by the state senate. LCDC's administrative arm is the Department of Land Conservation and Development. The state has a special court to rule on matters involving planning, the Land Use Board of Appeals (LUBA).

Oregon Department of Fish and Wildlife

The Oregon Department of Fish and Wildlife (ODFW) is responsible for maintaining optimum numbers of indigenous fish and wildlife, and to ensure that no species are threatened with extinction. ODFW is also responsible for developing and administering fish and wildlife regulations. ODFW has sought to restore riparian habitat on Department lands and has actively sought and encourages other agencies and private landowners to follow their lead. ODFW monitors the Owyhee System angling effort and harvest, as well as the hunter effort and harvest. Of significant concern to ODFW in the Owyhee area are the bighorn sheep herds.

Oregon State Land Board

The Division of State Lands (DSL) is the administrative arm of the State Land Board (composed of the Governor, Secretary of State, and State Treasurer). Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund as well as the Oregon Removal-Fill Law. These assets include the beds and banks of Oregon's navigable waterways and are to be managed for the "greatest benefit for the people of this State, consistent with the conservation of this resource under sound techniques of land management."

The State's removal-fill law 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 the State's waterway. The permit review process involves coordination with the natural-resource and land use agencies from local through federal levels. Within Oregon Scenic Waterways, special authorization is needed from the Board and DSL for "any alteration of the beds and banks."

Oregon State Parks and Recreation Department

The Oregon State Parks and Recreation Department (OSPRD) is responsible for the acquisition, improvement, maintenance and operation of Oregon's State Park system. The system is directed by the State Parks Administrator through a headquarters in Salem and five Regional Park Supervisors stationed throughout the State. In addition to operating the State Parks, the department gives technical assistance to local government agencies on park matters, develops and maintains the Statewide Comprehensive Outdoor Recreation Plan (SCORP), and administers the Federal Land and Water Conservation Fund matching grant program in Oregon. It also administers several special programs including the Oregon Beach Law, State Historic Preservation program, Oregon Recreational Trails System, State Scenic Waterways, and Willamette Greenway.

The 1988-1993 edition of the SCORP is consistent with Statewide Planning Goals and recognized the 1988 Omnibus Wild and Scenic River Act. BLM

planning process and agency interrelationships. In 1990, OSPRD entered into a Memorandum of Understanding with BLM and Forest Service in Oregon to insure all three agencies would work cooperatively on rivers within overlapping jurisdiction.

Oregon Scenic Waterways Program

The Oregon Scenic Waterways Program is administered under the authority of the Oregon State Parks and Recreation Commission (ORS 390.805 to ORS 390.925) through the Oregon Department of Parks and Recreation. Administrative rules (OAR 736-40-005 to OAR 736-40-095) have been adopted to govern the program. Part of this rule, OAR 736-40-035, is included in Appendix E. This section includes general land management rules that pertain to all scenic waterways. In addition to general land management rules, specific classifications and land management rules are generated for given river segments in the system. These classifications and rules are created through the management planning process, and tailored to the actions necessary to maintain and protect identified special attributes and the existing character of the river corridor.

In addition to private land owners and county land use planning agencies, other state agencies must comply with the scenic waterway law and rules. The Parks Commission and the Department of Parks and Recreation also work closely with federal agencies to assure their actions are compatible with scenic waterway law, rules, and resource management recommendations. For more information on how the general and specific land management rules are administered, see Appendix E.

Oregon State Marine Board

The Oregon State Marine Board was established in 1959. The Board promotes safe recreational boating and regulates the use of watercraft on waterways throughout the state. All motorized watercraft and sailboats over 12' in length are required to be titled and registered with the Marine Board. Fishing and hunting guides and outfitters who operate in Oregon are also required to register with the Board.

The Board has the authority to adopt rules governing the operation of recreational watercraft including the ability to "make special regulations relating to the operation of boats, including the establishment of designated speeds and prohibition of the use of motorboats for the protection of game and game fish at the request of the Oregon Department of Fish and Wildlife, or the carrying out of the provisions of the federal Wild and Scenic Rivers Act, Public Law 90-542, and the Oregon Scenic Waterways Act, ORS 390.805 to 390.925."

State boating laws and operating rules are enforced by county sheriffs and the State Police. The Marine Board contracts for local enforcement services and provides the necessary funding for staff, equipment, and training for marine programs in 33 counties. In addition to law enforcement, marine patrols conduct safety inspections, place and maintain uniform waterway markers and navigational aids, and provide search & rescue services.

Grants for the development and maintenance of boating related facilities are also available to state agencies, cities, counties, port authorities, and park and recreation districts from state funds appropriated to the Board. The Board also develops and distributes boating education and safety materials including

printed literature, school programs, and informational kiosks at boating access sites. Funds for the Board's programs and services come from fees paid by boaters, fuel taxes, and federal grants.

State Historic Preservation Officer

The State Historic Preservation Officer is a state official, appointed by the Governor in accordance with the National Historic Preservation Act (NHPA) of 1966, as amended, and designated by 36 CFR 800 to be responsible for the liaison with Federal agencies in implementing the NHPA and Executive Order 11593.

Advisory Committee on Historic Preservation

The Oregon Advisory Committee on Historic Preservation consists of members recognized professionally in the fields of history, architectural history, architecture, archaeology and/or other disciplines. One member represents the public at large and one represents Native Americans. The members are appointed by the Governor.

The Committee is charged with reviewing nominations to the National Register of Historic Places within the State and recommending approved nominations to the State Historic Preservation Office pursuant to the National Historic Preservation Act of 1966. The Committee also reviews Statewide Plans for Historic Preservation.

Oregon Water Resources Department

Oregon Water Resources Department is responsible for the management and allocation of the state's water resources. A citizen body, the Water Resources Commission, develops policy and has authority on various water related issues. These policies are included in basin programs. Basin programs generally classify the streams and lakes. The classifications include domestic, livestock, municipal, irrigation, power, industrial, mining, recreation, wildlife and fish life cycle uses. Approved Basin Programs are considered planning and guidance documents, and are adopted as administrative rules which reflect how water is currently used, and its future use and allocation. Sixteen of Oregon's 18 river basins have a basin program that is periodically updated.

The Scenic Waterway Act prohibits new dams, impoundments, and placer mining in Scenic Waterways and on tributary streams within Scenic Waterway boundaries. The Scenic Waterways Act requires Water Resources Commission concurrence on proposed land condemnations, new scenic waterway management plans and scenic waterway additions proposed by State Parks and Recreation Department for designation by the governor. In response to the court's interpretation of the Oregon Scenic Waterways Act in *Diack v. City of Portland, Oregon and Oregon Water Resources Department* decision (Appendix E), the Water Resources Commission must also assure its actions have no adverse effects on flows that support fish, wildlife, and recreation in downstream Scenic Waterways. The Water Resources Commission has approved the staff recommended Scenic Waterway Flow Assessments for the Owyhee River. This flow assessment information can be found in Chapter Five on pages ?????.

Oregon State Police

The Department of State Police was created to serve as a rural patrol and to assist local law enforcement agencies. This agency is empowered to enforce all

Oregon statutes without limitation by county or other political subdivision. The Department totals 894 members strategically located at 46 stations/posts throughout the State.

The Department enforces State laws and rules. These include river management and use rules adopted by the OSMB, State Parks and Recreation Department and ODFW. State Police activities are coordinated with local and federal law enforcement agencies and assisted by the general public. For example the TIP (Turn in Poachers) Program has been established in cooperation with the ODFW and the Oregon Hunters' Association. This program is designed to involve citizens in reporting wildlife law violations. Responses from citizens throughout the State have resulted in many poaching arrests and convictions.

Oregon Department of Environmental Quality

Under a memorandum of understanding, the Oregon Department of Environmental Quality and federal agencies work together to meet implementation requirements of the Clean Water Act (P.L.92-500), as amended. The Federal Fish and Wildlife Conservation Act requires wildlife conservation be given equal consideration and be coordinated with other features of water developments.

Oregon Department of Agriculture

The Oregon Department of Agriculture cooperates with local soil and water conservation districts to establish mutual goals in coordinating range and watershed management practices and to gather and share natural resource information that has proven beneficial for use on public and private lands. Cooperation of appropriate weed control districts also occurs as needed to deal with infestations of noxious weeds.

Malheur County Planning

The Wild and Scenic Rivers Act of 1968, the Omnibus Oregon Wild and Scenic Rivers Act of 1988, the Federal Land Policy and Management Act (FLPMA) of 1976 and the National Environmental Protection Act of 1969 (as amended) all encourage or mandate intergovernmental coordination, consultation and, where possible, plan consistency. Since the Omnibus Act envisioned a high reliance of local comprehensive plans to achieve the objectives of the Act, a review of the existing plan for Malheur County is critical.

County land use plans for private lands must conform to Statewide planning goals and objectives. Virtually all of the BLM and State-managed (private and state-owned) lands within the river planning area are designated by the county "exclusive farm use" or "exclusive range use" zones.
Through the state land use plan acknowledgment process, counties are required to: 1.) recognize the state and federal status of the designated segments of the Owyhee River System, 2.) provide for appropriate land uses and development standards for private lands adjacent to the river, 3.) develop a formal coordination process with the State Parks and Recreation Department for review of local development proposals on lands adjacent to the river.

Malheur County's 1984 Land Use Plan states that the county will cooperate with state and BLM in their efforts to protect the segments of the Owyhee River designated a scenic waterway and will initiate efforts to protect the rights of private property owners whenever they overlap. And, the county will apply the steps of the Goal 5 rule (to conserve open space and protect natural and

scenic resources) when possible future designation of additional segments of the Owyhee River as a State Scenic Waterway or a National Wild and Scenic River occurs. Review of the Malheur County Land Use Plan is underway as of 1993 and should incorporate protective measures for these three rivers.

Malheur County Sheriff Department

The Malheur County Sheriff Department is empowered to enforce all Oregon Statutes. They generally work within Malheur County, however, they do have authority to cross county lines within the State. County sheriff activities are coordinated with federal and state law enforcement agencies and assisted by the general public. The sheriff department also enforces river management laws and rules adopted and implemented by the State Marine Board. BLM assists the county sheriff in search and rescue operations within the river canyons.

Appendix E

Oregon State Scenic Waterway Program

BACKGROUND

The Oregon Scenic Waterway Act was established by a ballot initiative in 1970. The original Oregon Scenic Waterways system created by the Act included 496 free-flowing miles of six rivers. The Owyhee is one of the six rivers that were first included in the system.

Rivers can be added to the system through designation by the Governor or the legislature. Such actions have added significant mileage of five rivers, as well as Waldo Lake, to the Scenic Waterways system since passage of the original Act.

Rivers can also be added to the system by the citizens of Oregon. In 1988, Oregon voters passed the Oregon Rivers Initiative (Ballot Measure #7), which added 573 river miles to the system. There are now one lake, and segments of 19 rivers (1,148 miles), in the State Scenic Waterways system.

PROGRAM GOALS

The scenic waterway program promotes cooperative protection and wise use of rivers in the system by all agencies (federal, state, and local), individual property owners, and recreation users. Program goals are:

- To protect the free-flowing character of designated rivers for fish, wildlife, and recreation. No dams, reservoirs, impoundments, or placer mining activities are allowed on scenic waterways.

- To protect and enhance scenic, aesthetic, natural, recreation, scientific, and fish and wildlife values along scenic waterways. New development or changes of existing uses proposed within a scenic waterway are reviewed before they may take place.

- To protect private property rights. The Act discourages unsightly structures or inappropriate development that could be a nuisance to neighboring landowners or even depreciate property values. It prohibits pollution and the disturbance of adjacent surface lands by placer mining. It also prohibits public use of private property without explicit consent of the landowner.

- To promote expansion of the scenic waterway system. The Act sets up a process for adding new rivers to the system and established criteria for candidate rivers.

- To encourage other local, state, and federal agencies to act consistently with the goals of the program. Oregon State Parks reviews plans and decisions made by other agencies to ensure consistency with the scenic waterways program.

ADMINISTRATION

Scenic waterways are administered under the authority of the Oregon State Parks and Recreation Commission (ORS 390-805 or 390-925). Administrative rules (OAR 736-40-030 and 736-40-035) have been adopted as general land management guidelines. In addition to the general land management rules, specific rules are generated for management of adjacent lands along each

river segment in the system. These rules are created through the management planning process, and tailored to the actions necessary to maintain the existing character of the designated river corridor.

The Act and the Commission's rules require the evaluation of proposed land use changes within one-quarter mile from each side of the river for their potential impacts on aesthetic and scenic values, as viewed from the river Property owners wanting to build roads or houses, develop mines, harvest timber, or other similar projects, must provide written notification to the Oregon State Parks and Recreation Department. Parks evaluation of the project will be coordinated with other natural resource agencies (federal and state) having regulatory responsibility and with the local jurisdiction. Parks relies on its river classification and land management rules for each segment of the scenic waterway to determine whether the proposed project is incompatible or inconsistent with the designated classification. State Parks will work with the landowner to reach a mutually satisfactory resolution of any conflicts. Where such a resolution cannot be reached, the Commission must decide, within one year of the original notification, whether to pay the property owner for the land or the development rights.

Other local and state agencies must comply with the scenic waterway law and rules. Parks also works closely with federal agencies to assure their actions are compatible with scenic waterway law, rule, and resource management recommendations.

In the case of the Owyhee River, the scenic waterway management program involves the classification of the entire waterway in its two segments as"Natural River Area" as indicated on page ???. Also, there is one land management rule specific to the Owyhee (page ????) in addition to the following general land management rules.

GENERAL RULES OF LAND MANAGEMENT

736-40-035 These rules and regulations governing the use of related adjacent lands and improvements made on or to these lands apply to all designated scenic waterways. Land management on scenic waterways includes, but is not limited to, the following examples:

(1) Timber Harvest: The forest cover on related adjacent land is a part of the scenic beauty of the waterway and notification of planned timber harvest operations must be given to the Commission one year prior to commencement. the notification must include a plan specifying timber to be cut, road locations, logging methods, slash cleanup, soil stabilization, revegetation measures and any other details as the Commission may require.

(2) Tree Cutting: No person shall cut any living tree within a scenic waterway without prior written notice except as provided in these rules.

(3) Grazing and Farming: Existing use in the form of grazing or farming of the related adjacent land is a part of the scenic beauty of the waterway. Notification is not required for:

(a) Construction of fences;

(b) Maintenance of farm buildings, fences or appurtenances necessary to existing use;

(c) Laying or irrigation lines;

(d) Pumphouse construction, if not in violation of OAR 736-40-0303(5);

(f) Crop rotation;

(g) Variations in grazing land management;

(h) Placing of grazing land under cultivation, except within classified natural river areas named in OAR 735-40-045 through 736-40-075;

(i) Construction of silos and grain storage facilities, and other structures or buildings as are needed in connection with the existing use of the related adjacent land, if not in violation of OAR 736-40-030(5), except within classified natural river areas named in OAR 736-40-045 through 436-40-075;

(j) Cutting of danger trees. Notification is required for construction of new roads or improvement of existing roads.

(4)Suburban Housing: Notification is not required for:

(a) Maintenance of existing homes in a manner compatible with these rules and regulations;

(b) Modifications to existing single family dwellings, if not in violation of OAR 736-40-030(5);

(c) Construction of garages necessary to the use of existing homes, if not in violation of OAR 736-40-030(5);

(d) Changes in or additions to homesite landscaping which do not impair vegetation screening structures from view from the river;

(e) Construction of protective fences necessary to use of the home;

(f) Cutting of firewood for occupant's dwelling;

(g) Cutting of danger trees. Notification is required for construction of new roads or improvement of existing roads.

(5) Prospecting, Mining, Dredging, and Quarrying:

(a) All prospecting, mining, dredging, and quarrying operations, including removal or movement of gravel, rocks and sand within related adjacent lands, require notification to the Commission as prescribed herein:

(b) Such notification shall include plans to insure that debris, silt, chemicals or other materials, shall not be discharged into or allowed to reach the waters within a scenic waterway and that the natural beauty of the scenic waterway shall not be impaired substantially.

(6) Transportation Facilities and Utilities:

(a) No roads, railroads or other facilities for transportation or utilities shall be constructed or improved within a scenic waterway without notification to the Commission as prescribed by the Act and herein:

(b) The Commission, whenever practicable, will require the sharing of land and airspace by such facilities and utilities. All permissible transportation facilities and utilities shall be so located as to minimize impairment of the natural beauty of the scenic waterway. For example,it will be desirable to place electrical and telephone liens underground wherever reasonably practicable.

(7) Structures, Buildings, and Other Improvements: Except as provided in OAR 736-40-030(5), sections (3) and (4) of this rule and OAR 736-40-045 through 736-40-075, no structures, buildings, or other improvements shall be made, erected or placed on related adjacent lands without notification to the Commission as prescribed by the Act and herein. Permitted new structures, buildings, or other improvements on related adjacent lands which can be seen from the waters within a scenic waterway shall:

(a) Be of such design and be constructed of such materials as to be unobtrusive and compatible with the scenic qualities of the area. For example, the following shall apply:

(A) All structures shall be finished in muted tones appropriate to their natural surroundings;

(B) No large areas, including roofs, shall be finished with white or bright colors or reflective materials;

(C) Except for large farm buildings such as barns, metal siding or roofing shall not be used;

(D) No structures shall exceed 30 feet in height from natural grade on a side facing the river;

(E) All structures shall be so designed and constructed that little or no soil is left exposed when construction is completed.

(b) Be located in such a way that topography and natural vegetation make them as inconspicuous as reasonably practicable, and in no case obtruding on the view from the river. The Commissions may require that additional vegetative screening be established and maintained. In such event, it shall be evergreen, wherever practicable, and compatible with natural growth in the area.

(8) Mobile homes, modular residential structures, house trailers, campers and similar structures and vehicles. Mobile homes, modular residential structures, house trailers, campers, motor homes and the like shall not be established as dwellings, either permanent, (or) seasonal or temporary, within related adjacent lands unless they are entirely concealed from view from the waters within a scenic waterway by topography, except, that those mobile homes, modular

residential structures and house trailers that are at least 20 feet wide, with exterior dimensions, less hitch, of 800 square feet, may be permitted under these rules subject to the same requirements and standards set forth in the previous section relating to criteria for review for structures and improvements that are visible from the waters within a scenic waterway. Additionally, except when a mobile home, modular residential structure, house trailer or the like is not set on a ground-level foundation, full skirting shall be installed which in design, color and texture appears to be an integral part of the exterior of the structure:

(a) For purposes of these rules, a structure is a mobile home, modular residential structure, house trailer, camper or motor home if it is used, designed or intended to house persons, and is transported to the site in a state of substantial prefabrication. Once a structure fulfills this test, it shall remain subject to the rule regardless of whether the wheels or other temporary assembly have been removed or detached, and regardless of whether the structure is subsequently relocated;

(b) Within public recreation sites and transient public trailer parks where travel trailers, campers, motor homes and similar vehicles are permitted by the public agency, firm or individual maintaining the facility, their transient, short-term use by travelers is allowed, but they shall not be left on the site during their user's absence of more than three (3) days's duration.

(9) Maintenance of Structures and Improvements: Owners and users of existing structures and other improvements shall maintain them and their surroundings in a manner and condition in harmony with the environment, compatible with the objectives set forth in these rules and regulations for the classified river area in which they lie, and without impairing substantially the natural beauty of the scenic waterway. The existing color of such structures may be maintained.

(10) Replacement of Existing Structures and Improvements: Replacement of existing structures and improvements including those lost by fire, flood or other casualty will be permitted, provided the new structure or improvement is in compliance with provisions of the Act and these rules and regulations. Notification procedures et forth in OAR 736-40-040 and Commission approval are required.

(11) Advertising: No signs or other forms of outdoor advertising that are visible from waters within a scenic waterway shall be constructed or maintained. Property protection signs (No Hunting, No Trespassing, et cetera) are exempted.

(12) Erosion Protection: The Commission recognizes that erosion protection work and maintenance may be necessary on riverbanks and related adjacent lands along the scenic waterways. Notification, which shall include plans to protect the natural beauty of the scenic waterway, and Commission approval are required.

(13) Submerged and Submersible Lands:

(a) No dam or reservoir or other water impoundment facility shall be constructed or placer mining permitted on waters within scenic waterways. No water diversion facility shall be constructed or used except by right previously established or as permitted by the State Engineer;

(b) No bank protection works or dredging facility shall be constructed or used on such waters, except as permitted by the Director of the Division of State Lands and approved by the State Land Board.

(14)Emergencies:

(a) The owner or his authorized agent may act in emergencies without prior notice when necessary in the interest of public safety, or safety of his own property except that notice of any action taken shall be filed with the Commission not later than seven days following the commencement of the emergency procedures;

(b) The owner or his authorized agent must show that the emergency situation required immediate action to prevent immediate danger or damage. Such emergency procedures shall not be extended beyond the minimum necessary to accomplish the needed protection safely and shall be conducted throughout in such manner as to minimize impairment of the natural beauty of the scenic waterway. For example, car bodies and similar scrap or trash shall not be used as riprap.

(15) Solid Waste, Pollution and Sanitation: Owners, occupants and users of related adjacent land shall comply with the rules and regulations of the Department of Environmental Quality relating to solid waste control, water, air and noise pollution control and sewage disposal.

River Classification and **Land** Management Rule Specific to the **Owyhee** River Scenic Waterway

736-40-055 Natural River Area:

(1) The entire Owyhee River Scenic Waterway, in its two segments, is classified as a Natural River Area.

(2) In order to preserve the river and related adjacent lands in an essentially primitive condition, no new structures or improvements which are visible from the river, other than those erected or made in connection with the existing agricultural uses, or those needed for public outdoor recreation or for resource protection will be permitted. Commercial public service facilities, including resorts and motels, lodges and trailer parks, and additional dwellings which are visible from the river will not be permitted.

Appendix F

Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING

FOR RIVER MANAGEMENT

BETWEEN

BUREAU OF LAND MANAGEMENT (OREGON STATE OFFICE)

PARKS AND RECREATIONDEPARTMENT (OREGON STATE OFFICE)

AND

USDA FOREST SERVICE

PACIFIC NORTWEST REGION

This agreement is between the United States, Bureau of Land Management (BLM) acting by and through the Oregon State Director; the USDA Forest Service (FS), acting by and through the Regional Forester, Region6; and the State of Oregon, by and through the Parks and Recreation Department (Parks).

WITNESSETH:

WHEREAS, on various rivers throughout Oregon, the State of Oregon, the BLM and tha FS administer, manage or regulate the use of lands within certain river corridors and have various programs and responsibilities in regard to these programs and lands under their respeccivt jurisdiction; and

WHEREAS, the State of Oregon, under the state Scenic Waterways Ace and the BLM and FS under the federal Wild and Scenic Rivers Act are charged with parallel duties of identification, planning, and administration of rivers with special qualities as s a t out in those acts; and

WHEREAS, the State of Oregon, BLM, and FS have differing authorities, jurisdictions, and administrative capabilities as to the lands and waters within the rivar corridors; and

WHEREAS, the State of Oregon and the United States have common objectives as to the planning and management of these lands and water resources making it desirable for the State of Oregon and the United States to ccoparate in tha planning and management of these resources; and

WHEREAS, the Regional Foraster, FS, has the authority to enter into this agreement by virtue of the authority granted to the Secretary of Agriculture by Sec. 11, P.L. 90-542 as amended thereto; and

WHEREAS, tha State Director, BLM has the authority to enter into this agreement by virtue of the authority granted to the Secretary of the Inrtrior by the Federal Land Policy and Management Act (42 U.S.C. 1737) and for ccmpcnants of the National Wild and Scenic Rivers System by virtue of P.L. 90-542 as amended; and

WHEREAS, tha State of Oregon, by and through Parks enters into this agreement by virtue of the authority granted by ORS 390.140(2)(b) and

ORS 390.895.

NOW THEREFORE, it is agreed between rhe parties as follows:

A. When the State of Oregon, the BLM, or the FS determine that a river corridor is under formal consideration for designation under either the state or federal rivers programs, they will notify the other parties and afford them an appropriate opportunity for participation in consideration of the river corridor for designation.

B. The FS and the BLM agree to consult and coopsrate with Parks when conducting resource management planning within designaced wild and scenic river corridors, designated state scenic waterways, rivers considtrtd candidates for state or federal dtrignation or other rivers mutually agreed upon and identified.

C. When a river which is designated by the State of Oregon as a scenic waterway includes federal lands within its boundaries, Parks will consult and cooperate vith the BLM and/or FS AS approprfact during the establishment of management guidelines and administrative rules.

D. Work projects or activities which involve transfer Of money, services or property will require execution of a separate agreement. Alternative agreements include Challenge Cost-Share Agreements, Participating Agreements, Procurement Contracts and local Memorandum of Understanding. Each project will be signed and documented by the responsible organizational line officer using the appropriate agreement. These agreements will address such matters as planning for recreational developments, acceptable types end levels of use, resource management program constraints and guidelines, and administrative arrangements including the transfer of funds and the sharing of personnel to effectively plan for and manage river corridors. If tither federal agency does not manage Lands in a particular river corridor, that agency need not be a party to the supplemental agreement for tht river.

E. It is recognized that it is in the best interest of the state and federal agencies to avoid duplicative planning processes on designated rivers, Therefore, to the greatest extent possible, management planning on designated rivers shall be consolidated into one process - state and federal - that satisfies the needs of both entities.

In some cases, it may ba necessary to determine alead orcoordinating agency co facilitate the promos. Tht responsibilities of the various involved parties shall be enumerated in a memorandum of understanding as described in (D) above.

F. Parks will, to the extent possible, communicate with affected state agencies regarding FS or BLM rivtr corridor planning and management activities subject to this agreement.

G. BLM and FS fully recognize the need to notify and consult with Parks at the earliest possible opportunity regarding land use activities on federal lands that may impact the natural resource values of the rivers shown in Attachment A of this agreement. Upon specific request by FS or BLM, Parks agrees to expeditiously review FS And BLM land use activities on federal lands for any rivers listed in Attachment A. Parks review shall be to determine An activity or project's compatibility with the maintenance of the river's natural beauty according to the standards in the scenic waterway management rules (OAR Chapter 736 Division 40).

H. It is recognized that the parties to this Agreement And their agencies And rtprtsentativts have responsibilities under statute or otherwise which cannot be waived or abrogated. This agreement does not affect such non-discreeionary mandates.

I. Nothing in this Agreement shall commit the parties or their agencies or representatives to tht expenditure of funds not authorized by law.

J. Any party may withdraw from this Agreement upon written notice to the othtr parties. The withdrawal of one or more parties shall not affect the validity of this Agreement As to the remaining partiss.

K. Amendments to this Agreement may be proposed by any party and shall become effective on approval by all parties.

L. No member or delegate to Congress or rtsident Commissioner shall be admitted to any share or part of this Agreement. or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this Agreement if made with A corporation for its general btnefit.

M. Attachment A is a list of existing state scenic waterways.

N. Attachment B is A list of existing Federally-designated rivers.

The Parks and Recreation Commission, by a duly-adopted delegation order number 1, authorized the State Parks Director to execute this agreement on behalf of the Commission. Approval for this delegation order was givan • ⌀ its January 26, 1990, meeting.

State of Oregon, by and through its State Parks And Recreation Department

Director

United States of America, by And through its USDA Forest Service, Region 6

for JOHN F. BUTRUILLE
Regional Forester

United States of America, by And through its USDI Bureau of Land Management, Oregon State Office

for State Director

Appendix G

Land Acquisition Parcels

Priority: 1
Landowner: Z-3 Hereforde
Legal Deecription:

T. 35 S., R. 45 E.. W.M.
Sec. 3: SE¼SW¼, W½SE¼
9: N½SE¼, SW¼SE¼
10: NW¼NE¼, NE¼NW¼, SW¼NW¼

Priority: 2
Landowner: Jeff Anderson Estate, Inc.
Legal Deecription:

T. 36 E., R. 47 E., W.M.
Sec. 15: N½SW¼
16: NE¼SE¼

Priority: 3
Landowner: Lequerica Brothers, Inc.
Legal Description:

T. 29 S., R. 41 E., W.M.
sec. 9: SE¼
16: NW¼NE¼, W½SE¼
21: NW¼NE¼

Priority: 4
Landowner: Lazaro Hendieta
Legal Description:

T. 34 S., R. 45 E.. W.M.
Sec. 36: S½

T. 35 S., R. 45 E., W.H.
Sec. 2: Lot 1

T. 34 S., R. 46 E.. W.H.
Sec. 30: S½SE¼
31: *Lot 4,* NW¼NE¼, E½NW¼, NE¼SW¼

Priority: 5
Landowner: *Ambrose* A. Maher
Legal Description:

T. 35 S., R. 45 E., W.M.
Sec. 16: W½NE¼, NW¼, N½SW¼

Priority: 6
Landowner: Robert Dowell
Legal Deecription:

T. 31 S., R. 41 E., W.M.
Sec. 9: NW¼NE¼, N½NW¼, S½NE¼NE¼

Priority: 7
Landowner: Harry Riley (F.L. Kirkhart, CP)
Legal Description:

T. 30 S., R. 41 E., W.M.
Sec. 33: SE¼SW¼

Priority: 8
Landowner: United Farms, Co.
Legal Description:

27 S., R. 42 E., W.M.
Sec. 19: SE¼SW¼

Priority: 9
Landowner: Echo Canyon cattle Co.
Legal Description:

T. 32 S., R. 42 E., W.M.
sec. 6: S½S½ of Lot 11

Appendix H

Recreation Inventory and Planning Tools

RECREATION OPPORTUNITY SPECTRUM (ROS)

The Bureau of Land Management and other agencies use the Recreation Opportunity Spectrum (ROS) as an inventory and planning tool to characterize outdoor recreation settings. ROS provides a framework for understanding the relationships and interactions of visitor preference and use of natural resources for recreational activities. It also provides standards Limits of Acceptable Change monitoring programs. ROS contains a range of opportunity classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban. These classes provide a spectrum of opportunities ranging from primitive, at one end of the spectrum, where the level of solitude, potential for risk taking, and level of self reliance is high, to a high level of development, at the other end, where there are opportunities for socializing, security, and comfort. The classes are described below.

Primitive: Characterized by an unmodified natural environment of fairly large size where evidence of humans and human-induced restrictions and controls is essentially absent and motorized use is not permitted.

Semi-Primitive Nun-motorized: Characterized by a predominantly natural environment of moderate to large size where evidence of humans and human controls is present but low and motorized use is not permitted.

Semi-Primitive Motorized: This class is similar to semi-primitive non-motorized except that motorized use is permitted. Disturbance of the environment is more evident than in the semi-primitive non-motorized class.

Roaded Natural: Characterized by a predominantly natural environment with moderate evidence of human modification and control that are in harmony with a natural setting.

Rural: Characterized by a substantially modified natural environment aimed at enhancing specific recreation activities, including facilities for specialized activities and motorized use and parking.

Urban: This class is similar to rural, but facility development is intensified and the environment, though natural appearing, if often landscaped. Modifications are designed to enhance specific recreational activities.

LIMITS OF ACCEPTABLE CHANGE (LAC)

The LAC process gives primary attention to resource conditions that exist and that are judged acceptable. Managers are interested in achieving certain conditions and in the relative effects of different management actions to achieve those desired resource conditions. The process requires deciding what kind of resource conditions are acceptable, and then prescribing actions to protect or achieve those conditions. The LAC approach to planning is not a new idea. It represents the latest efforts to improve defining both inputs to and outputs from the planning process.

The LAC process consists of four major components:

(1) the specification of acceptable and achievable resource and social conditions, defined by a series of measurable parameters.

(2) an analysis of the relationship between existing conditions and those judged acceptable.

(3) identification of management actions necessary to achieve these conditions.

(4) a program of monitoring and evaluation of management effectiveness. These four components are broken down into nine steps to facilitate application.

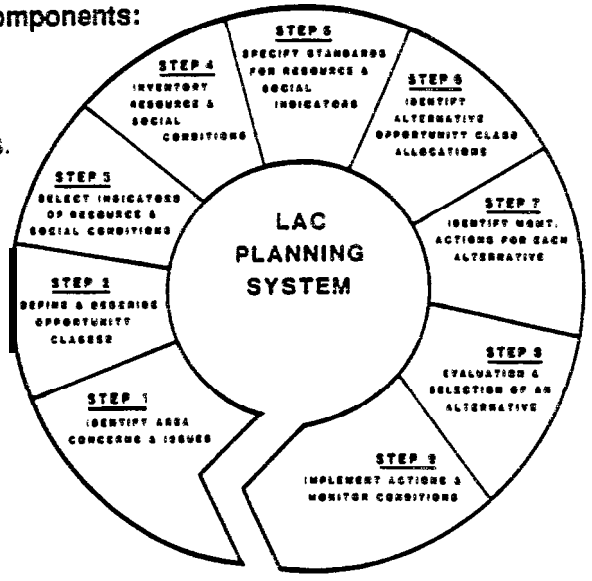


Figure 1 —The Limits of Acceptable Change (LAC) planning system.

Note: The following publication was used as a source for this information:

Stankey, George H., David N. Cole, Robert C. Lucas, Margaret E. Petersen and Sidney S. Frissell, (1985), The Limits of Acceptable Change (LAC) System for Wilderness Planning. General Technical Report INT-176, Ogden, UT.

VISUAL RESOURCE MANAGEMENT (VRM)

Visual Resource Management (VRM) has dual program purposes: to manage the quality of the visual environment, and to reduce the visual impact of development activities while maintaining effectiveness in all Bureau resource programs. VRM also identifies scenic areas that warrant special protection.

There are five management classes that describe the different degrees of modification allowed to the landscape. It is BLM's policy to manage all designated Wild and Scenic Rivers that are classified as wild. such as the Main, West Little. and North Fork Owyhee Rivers, as VRM Class I. However, all five classes and guidelines are described below.

Class I: Natural ecological changes and very limited management activity are allowed. Any contrast created within the characteristic landscape must not attract attention.

Class II: Changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. Contrasts are seen, but must not attract attention.

Class III: Contrasts to basic elements caused by a management activity are evident, but should remain subordinate to the existing landscape.

Class IV: Any contrast attracts attention and is a dominant feature of the landscape in terms of scale, but it should repeat the form, line, color, and texture of the characteristic landscape.

Class V: This classification is applied to areas where the natural character of the landscape has been disturbed to the point where rehabilitation is needed to bring it up to one of the four other classifications. It is often used as an interim classification until objectives of another class can be reached.

APPENDIX I

Legal Descriptions of Administrative Boundaries
Chvyhee River

Legal descriptions begin at Oregon-Idaho stateline (for the Main and North Fork) and the headwaters (for the West Little) and proceed downstream. The map numbers refer to 7 1/2 min. topos in the Vale Office.

Map No.	Township South	Range East	Meridian	Section		Description
1 of 17	37	39	W.M.	30	R. Rim	Traverse identifiable rim through Lots 1 and 2
					L. Rim	Traverse identifiable rim through Lot 4
	37	48	W.M.	25	R. Rim	Traverse identifiable rim through E1/2 E1/2
					L. Rim	Traverse identifiable rim starting at the N1/2 SE1/4 SE1/4 and ends at the N1/2 NW1/4 NW1/4
	37	48	W.M.	24	R. Rim	Traverse identifiable rim starting at the S1/2 SE1/4 SE1/4 and ends at the N1/2 SW1/4 NW1/4
				26	L. Rim	Traverse identifiable rim starting and ending in the N1/2 NE1/4 NE1/4
				23	R. Rim	Traverse identifiable rim starting in the N1/2 SE1/4 SE1/4 and ends in the E1/2 NW1/4 NE1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in the E1/2 NW1/4 NW1/4
				14	R. Rim	Traverse identifiable rim starting in the E1/2 SW1/4 SE1/4 and rim ends in the SW corner of the SE1/4 SE1/4 NE1/4 and along east-west boundary line between the NE1/4 and SE1/4, fence north along section line between Sec. 13 and 14 to identifiable rim in the NE1/4 SE1/4 NE1/4 and ends in the E1/2 NE1/4 NE1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SW1/4 SW1/4 and ends in the N1/2 NW1/4 NW1/4
				15	R. Rim	Traverses identifiable rim starting and ending in the N1/2 NE1/4 NE1/4

1 of 17	37	48	W.M.	11	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in the N1/2 SW1/4 NW1/4
				10	L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in tne N1/2 SW1/4 NW1/4
2 of 17	37	48	W.M.	11	R. Rim	Traverses identifiable rim starting and ending in the NW1/4 NW1/4
				10	R. Rim	Traverses identifiable rim starting and ends in the NE 1 /4 NE1/4
					L. Rim	Traverses identifiable rim starting and ending in the N1/2 NW1/4
				3	R. Rim	Traverses identifiable rim starts in the SE1/4 SE1/4 and ends in the NW1/4 SW1/4
				9	L. Rim	Traverses identifiable rim starts and ends in the N1/2 N1/2
				4	R. Rim	Traverses identifiable rim starts in the E1/2 NE1/4 SE1/4 and ends in Lots 3 and 4
					L. Rim	Traverses identifiable rim starts and ends in the SW1/4 SW1/4
				5	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ends in Lot 4
2 of 17	36	48	W.M.	33	R. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
				32	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ends in the NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting and ending W1/2 SW1/4
2 & 3 of 17				31	R. Rim	Traverses identifiable rim starting at the section corner to sections 29, 30, 31 and 32 and ends in the NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 NE1 /4 SE1/4 and ends in Lot 1
				30	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ends in Lot 1
					L. Rim	Traverses identifiable rim starting in Lot 4 and ending in Lot 3
3 of 17	31	47	W.M.	24	R. Rim	Traverses identifiable rim starting and in the S1/2 SE1/4 SE1/4 and ends in the NW1/4 NW1/4

					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ends in the W1/2 NW1/4 SE1/4
				23	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ends in the N1/2 NW1/4 NE1/4
				25	R. Rim	Traverses identifiable rim starting and ending in NE1/4 NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NE1/4
3 of 17	36	47	W.M.	13	R. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
				14	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ends in the W1/2 SW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ends in the W1/2 NW1/4 SW1/4
				15	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ends in the W1/2 NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ends following the East West Section Line between 22 and 15 in the SW1/4 SE1/4 SE1/4, thence west along east west section line between 15 and 22 to identifiable rim in the SW1/4 SE1/4 SW1/4 thence along rim to NW1/4 SW1/4 SW1/4
				16	R. Rim	Traverses identifiable rim starting and ending in the NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the SE corner of SE1/4 NE1/4 SE1/4 and ending at the center of the east west line between the NW1/4 SE1/4 and SW1/4 SE1/4 thence west along line to SW corner of NW1/4 SE1/4 thence north to identifiable rim to east west line between the NW1/4 SW1/4 NE1/4 and SW1/4 NW1/4 NE1/4 thence north at the SW corner of the NW1/4 NE1/4 thence to the north south section line between sections 16 and 17 in the SW1/4 NW1/4 NW1/4 thence north along section line across drainage to identifiable rim in NW1/4 NW1/4 NW1/4 and ending on the north section line between sections 9 and 16 ending NW1/4 NW1/4 NW1/4
3 of 17				9	R. Rim	Traverses identifiable rim starting and ending in Lot 1 at the township line between 35 S. and 36 S. Thence west along township line to common section corner to sections 32 and 33 T. 35 S., and section 9, T. 36 S.
					L. Rim	Traverses identifiable rim starting and ending in lot 4

	35	45	W.M.	33	R. Rim	Traverses section line between Section 32 and 33 starting the SW corner of section 33 thence north along section line to center of SW1/4 NW1/4 SW1/4 thence diagonally east to the identifiable rim in SW1/4 NW1/4 SW1/4 to SW corner of NW1/4 NW1/4 thence north along north south section line between 32 and 33 crossing drainage to identifiable rim and ending at the NW corner of the SW1/4 NW1/4 NW1/4
				32	R. Rim	Traverses identifiable rim starting and ending in the NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending N1/2 NE1/4 NW1/4
				29	R. Rim	Traverses identifiable rim starting SW1/4 SE1/4 SE1/4 and ending in the NE1/4 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 to north south subdivision line between the E1/2 and N1/2 of SW1/4 across drainage to corner of the SW1/4 NE1/4 SW1/4 thence east across drainage to identifiab rim thence along to ending in the N1/2 NE1/4 NW1/4
3 of 17	35	45	W.M.	20	R. Rim	Traverse elevation line (4500 ft) north starting in the S1/2 SW1/4 SE1/4 and ending in the N1/2 NE1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending N1/2 NW1/4 NW1/4
3 & 4 of 17				17	R. Rim	Traverses elevation line (4500 ft) north starting in S1/2 SE1/4 SW1/4 and ending in the E1/2 SE1/4 SE1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending E1/2 NE1/4 SE1/4
				21	R. Rim	Traverses elevation line (4500 ft) starting and ending NE1/4 NE1/4
				16	R. Rim	Traverses elevation line (4500 ft) starting in the W1/2 SW1/4 SW1/4 to NW1/4 corner of the NW1/4 SE1/4 thence east to east quarter corner between section 16 and 17 thence north along elevation line (4500 ft) ending in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses north on elevation line (4400 ft) to the N1/2 NE1/4 NW1/4
4 of 17				9	R. Rim	Traverses elevation line (4400 ft) north starting in the S1/2 SW1/4 SE1/4 and ending in the E1/2 SE1/4 SE1/4
					L. Rim	Traverses elevation line (4400 ft) north starting in the SE1/4 SW1/4 and

						drops to 4300 ft elevation line and ending in the E1/2 NE1/4 SE1/4
				10	R. Rim	Traverses identifiable rim starting at the W1/2 SW1/4 SW1/4 and ending in the N1/2 NW1/4 NE1/4 thence east down section line between sections 3 and 10 to ending at corner common to sections 2, 3, 10 and 11 T. 35 S., R. 45 E.,
4 of 17				10	L. Rim	Traverses elevation line (4300 ft) starting in the S1/2 SW1/4 and NW1/4 to the point where 4300 ft. elevation line intersects the north-south subdivision of NE1/4 NW1/4 and NW1/4 NW1/4 thence north along north-south subdivision line and ending in the NE corner of the NW1/4 NW 1/4 on east-west section line between sections 3 and 10
	35	45	W.M.	3	L. Rim	Starting SE corner of the SW1/4 SW1/4 thence west along east-west section line between sections 3 and 10 to SW corner of the E1/2 W1/2 W1/2 thence north along subdivision line between the E1/2 W1/2 W1/2 and W1/2 W1/2 W1/2 to intersection of the identifiable rim at elevations 4800 ft and traverse the identifiable rim and ending in lots 1 and 2
				2	R. Rim	Starting at sec. corner common to 2,3,10 and 11 thence east along sec. line to the southeast corner of the SW1/4 SW1/4 thence north to the northeast corner of the NW1/4 NW1/4 thence east on township line to the southeast corner of the SW1/4 SW1/4 sec. 35 T. 34 S. R. 45 E.
	34	45	W.M.	35	R. Rim	Starting at southeast corner of the SW1/4 SW1/4 thence north to the northeast corner of the NW1/4 SW1/4 thence west ending at the west quarter corner sec. 35
4 of 17				34	R. Rim	Starting on the east quarter corner of section 34 thence west to SW corner of SE1/4 SE1/4 NE1/4 thence north to the NW corner SE1/4 SE1/4 NE1/4 thence west to center of the SW1/4 NE1/4, thence north and ending at the NW corner of NE1/4 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S 1/2 SW1/4 SE1/4 and ending in the N1/2 NW1/4 NW1/4
				27	R. Rim	Starting at the SW corner of the SE1/4 SW1/4 SE1/4 thence north to identifiable rim in center of the NW1/4 SE1/4 then ending by traverse of identifiable rim to the N1/2 NW1/4 NE1/4
					L. Rim	Traverse identifiable rim starting and ending in the S 1/2 SW1/4 SW1/4

				28	L. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the East quarter corner of section 28 thence north ending at section corner common to section 21, 22, 27, and 28
4 of 17	34	45	W.M.	22	R. Rim	Traverse identifiable rim starting in the S1/2 SW1/4 SE1/4 thence to north-south subdivision line between the NE1/4 SE1/4 and the NW1/4 SE1/4 thence north along subdivision line to identifiable rim ending at the north quarter corner of section 22
				21	L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NW1/4
				15	R. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 SW1/4
				16	R. Rim	Traverse identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 N1/2 NW1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 SW1/4
				17	L. Rim	Traverse identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NW1/4
				18	L. Rim	Traverse identifiable rim starting and ending in the NE1/4 NE1/4
				9	R. Rim	Traverse identifiable rim starting and ending in the SW1/4 SW1/4
				8	R. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 and ending in the NE1/4 NW1/4
				7	L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 to the SW corner of the NW1/4 NW1/4 SE1/4 thence north along subdivision line to identifiable rim then along rim ending in the N1/2 NE1/4 NW1/4
4 & 5 of 17	34	45	W.M.	5	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW 1/4 and ending lot 4
				6	L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in lot 5

5 of 17	33	45	W.M.	32	R. Rim	Traverses identifiable rim starting in the W1/2 SW1/4 and ending in the W1/2 SW1/4
5 & 6 of 17				31	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in lot 3
5 & 6 of 17				30	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in lot 3
				19	R. Rim	Traverses identifiable rim starting and ending in lot 10
6 of 17	33	44	W.M.	36	L. Rim	Traverses identifiable rim starting and ending in the N1/2 NE1/4
				25	L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the W1/2 NW1/4 NW1/4
				24	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting and ending at the corner common to section 23, 24, 25, and 26
				23	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NE1/4
6 of 17	33	44	W.M.	13	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 ending in the N1/2 NE1/4 NW1/4
				14	L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NW1/4
				12	R. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the west quarter corner section 12
				11	R. Rim	Traverse identifiable rim starting in the east quarter corner of section 11 and ending in the north quarter corner section 11
					L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 NW1/4

				10	L. Rim	Traverse identifiable rim starting and ending in the NE1/4 NE1/4
				2	R. Rim	Traverse identifiable rim starting in the south quarter corner section 2 and ending in lot 4
				3	R. Rim	Traverse identifiable rim starting and ending N1/2 NE1/4
					L. Rim	Traverse identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4
				4	L. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in N1/2 lot 4 except line drops to elevation line (4400 ft) in bottom of Skull Creek.
6 of 17	32	44	W.M.	34	R. Rim	Traverse identifiable rim starting in S1/4 corner of section 34 and ending in the W1/2 SW1/4 SW1/4
				33	R. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 NW1/4 NW1/4
					L. Rim	Traverse identifiable rim starting and ending in the W1/2 SW1/4 SW1/4
				32	R. Rim	Traverse identifiable rim starting and ending in the N1/2 NE1/4
					L. Rim	Traverse identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 NW1/4 NW1/4
				31	L. Rim	Traverse identifiable rim starting and ending in the NE1/4 NE1/4
				29	R. Rim	Traverse identifiable rim starting at the south quarter corner of section 29 and ending at the northwest corner NW1/4 SW1/4 NW1/4
				30	R. Rim	Starting at the northeast corner of NE1/4 SE1/4 NE1/4 running west on subdivision line between N1/2 S1/2 and S1/2 NE1/4 across Soldier Creek to identifiable rim and traverses to end in lot 1
					L. Rim	Traverse identifiable rim starting and ending in S1/2 S1/2
6,7,8 & 9 of 17	32	44	W.M.	19	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in lots 2 and 3
	32	43	W.M.	24	R. Rim	Traverses identifiable rim through N1/2 of section 24

					L. Rim	Traverses identifiable rim starting and ending in the S1/2 of section 24
				23	R. Rim	Traverses identifiable rim starting and ending in the N1/2 of section 23
					L. Rim	Traverses identifiable rim starting and ending in the S1/2 of section 23
				26	L. Rim	Traverses identifiable rim starting and ending in the N1/2 of section 26
				22	R. Rim	Traverses identifiable rim starting and ending in the NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 NW1/4
				15	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 and ending in the W1/2 SW1/4 NW1/4
9 of 17				16	R. Rim	Traverses identifiable rim starting and ending in the N1/2
					L. Rim	Traverses identifiable rim starting and ending in the S1/2
9 of 17	32	43	W.M.	17	R. Rim	Traverses identifiable rim starting and ending in the N1/2
					L. Rim	Traverses identifiable rim starting and ending in the S1/2
				18	L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending at the north quarter corner section 18, and traverses identifiable rim starting and ending in lot 1
					R. Rim	Traverses identifiable rim starting and ending on section corner common to section 7, 8, 17, and 18
				7	R. Rim	Traverses identifiable rim starting on section corner common to section 7, 8, 17, and 18 and ending in the W1/2 NW1/4 SW1/4
					L. Rim	Traverses identifiable rim starting and ending S1/2 SW1/4
9&10 of 17	32	42	W.M.	12	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4
10 of 17				11	R. Rim	Traverses identifiable rim starting and ending NE1/4 NE1/4 and starts in the N1/2 NE1/4 NE1/4 and ends in the N1/2 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in the N1/2 NW1/4 NW1/4

10 of 17	32	42	W.M.	2	R. Rim	Traverses identifiable rim starting and ending S 1/2 SE1/4 SE1/4 and starts in S1/2 SW1/4 SE1/4 and ends in the W1/2 NW1/4 SW1/4
					L. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW 1/4
				3	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the S1/2 SW1/4 SW1/4 and starts and ends in SW1/4 SW1/4 SW1/4
					L. Rim	Traverses identifiable rim starting and ending in the S1/2 SE1/4
				10	R. Rim	Traverses identifiable rim starting and ending in the N1/2 NW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting at the north quarter corner of section 10 to the southeast corner of the SE1/4 NE1/4 NW1/4 thence west along subdivision line and ending at the southwest corner of the SW1/4 NW1/4 NW1/4
				9	L. Rim	Traverses identifiable rim starting in the southeast corner of the SE1/4 NE1/4 NE1/4 and ending in the N1/2 NW1/4 NW1/4
				4	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting and ending in the S1/2 SW1/4 SW1/4
10 of 17	32	42	W.M.	5	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in the W1/2 NW1/4 SW1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NW1/4 SW1/4
				6	R. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in lot 12
					L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending at southwest corner of the SW1/4 SE1/4 thence north to the northeast corner of lot 60 thence west to the southwest corner of lot 49 thence north to the northwest corner of lot 49 thence west to the southwest corner of lot 44 thence north to the northwest corner of lot 44 thence west to the southwest corner of lot 38 thence north to the northwest corner of the S1/2 SW1/4 of lot 11
						End of boundary at China Gulch
12 of 17	31	41	W.M.	9	R. Rim	Traverses identifiable rim starting in the S1/2 NE1/4 NE1/4 and ending in

						the N1/2 NW1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 NW1/4 NW1/4 and ending in the N1/2 NE1/4 NW1/4
				4	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the N1/2 lot 2
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 lot 3
	30	41	W.M.	33	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in W1/2 SW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the W1/2 NW1/4 SW1/4
				32	L. Rim	Traverses identifiable rim starting in the E1 /2 NE1/4 SE1/4 and ending on south boundary of NW1/4 NW1/4 SE1/4 thence west to the southwest corner of the NW1/4 NW1/4 SE1/4 thence north to center of section 32 thence west to identifiable rim on south boundary of SE1/4 SW1/4 NW1/4 and to the west boundary of NW1/4 SW1/4 NW1/4 thence north ending at section corner common to section 29, 30, 31 and 32.
					R. Rim	Traverses identifiable rim starting and ending in the NE1/4
				29	R. Rim	Traverses identifiable rim starting and ending in the SE1/4
					L. Rim	Starting at common section to sections 29, 30, 31, and 32 north to identifiable rim on west boundary located in the NW1/4 SW1/4 SW1/4, thence along rim and ending in the E1/2 SE1/4 NE1/4
12 of 17	30	41	W.M.	28	R. Rim	Traverses identifiable rim starting in the W1/2 NW1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
					L. Rim	Traverses identifiable rim starting and ending in the W1/2 NW1/4
				21	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
					L. Rim	Traverses identifiable rim starting and ending in the W1/2 SW1/4 SW1/4 and starting and ending in the N1/2 NW1/4
				20	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the E1/2 SE1/4 NE1/4
				16	R. Rim	Traverses identifiable rim starting in the S 1/2 SE1/4 SW1/4 and ending in the

						W1/2 SW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting and ending in the W1/2 SW1/4
				17	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in the N1/2 NE1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the E1/2 NE1/4 SE1/4 and ending in the N1/2 NW1/4 NW1/4
				8	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
12 of 17	30	41	W.M.	7	L. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the N1/2 NE1/4 NE1/4
				6	L. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4
				5	R. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4
					L. Rim	Traverses identifiable rim starting in the W1/2 SW1/4 SW1/4 and ending in lot 2
				4	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in lot 4
	29	41	W.M.	33	R. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4
				32	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 SE1/4 and ending in the W1/2 SW1/4 NW1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the W1/2 NW1/4 SW1/4
12 & 13 of 17				31	R. Rim	Traverses identifiable rim starting in the E1/2 SE1/4 NE1/4 and ending in the N1/2 NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the SE1/4 NE1/4 SE1/4 thence to north center of SE1/4 NE1/4 SE1/4 thence west to southwest corner of the NW1/4 NW1/4 SE1/4 thence north to northwest corner of NW1/4 SW1/4 NE1/4 thence along identifiable rim ending in the N1/2 NE1/4 NW1/4
13 of 17	29	41	W.M.	30	R. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4

					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the E1/2 NE1/4 SE1/4
				29	R. Rim	Traverses identifiable rim starting in the W1/2 SW1/4 SW1/4 and ending in the E1/2 SE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the W1/2 NW1/4 SW1/4 and ending in the N1/2 NW1/4 NE1/4
				28	R. Rim	Traverses identifiable rim starting and ending NW1/4
				20	L. Rim	Traverses identifiable rim starting and ending in the SE1/4
				21	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending at east quarter corner and starts E1/2 SE1/4 NE1/4 and ends on the north boundary of the NW1/4 NE1/4 NE1/4, thence west to the northwest corner of the NW1/4 NE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the W1/2 NW1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
				22	R. Rim	Starts at west quarter corner and ends on the west boundary of the NW1/4 SW1/4 NW1/4
				16	R. Rim	Starts at the southwest corner of SE1/4 SE1/4, north to northwest corner of the NE1/4 NE1/4 thence east ending at section corner common to sections 9, 10, 15, and 16
					L. Rim	Traverses identifiable rim starting and ending in the W1/2
13 of 17	29	41	W.M.	9	R. Rim	Starts at the section corner common to sections 9, 10, 15, and 16 and ends at section corner common to section 3, 4, 9, and 10
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending at the northwest corner of the NE1/4 NE1/4
				3	R. Rim	Traverses identifiable rim starting at the section corner common to sections 3, 4, 9, 10 and ending in the southwest corner of the NW1/4 NW1/4 SW1/4 thence north along northsouth section line common to section 3 and 4 to township line between T. 29 S., and T. 28 S.
				4	L. Rim	Traverses identifiable rim starting at the southeast corner of the SW1/4 SE1/4 and ending on the west boundary line of NW1/4 NW1/4 SW1/4 at 3400 ft.

						elevation thence north on section line to elevation line 3600 ft ending at 3600 ft elevation line on the west boundary of lot 21
				5	L. Rim	Starts at 3600 ft. elevation line in the northeast quarter of lot 24 and ends on the 3600 ft elevation line on the west boundary of the northwest quarter of lot 23 thence north to the northwest corner of the southwest quarter of lot 18 thence west to northwest corner of the southwest quarter of lot 20 thence north along section line between section 5 and 6 and ending at the northwest corner of the southwest quarter of lot 12
13 of 17	29	41	W.M.	6	L. Rim	Starting at the northeast corner of the southeast quarter of lot 13 thence west to the southwest corner of the northwest quarter of lot 14 thence north to the township line at the northwest corner of lot 2
13 of 17	28	41	W.M.	32	L. Rim	Starting at the southwest corner of section 32 thence north along section line between sections 31 and 32 section corner common to sections 29, 30, 31, and 32 thence east ending at the northeast corner of the NE1/4 NW1/4
				34	R. Rim	Starting at the section corner between section 3 and 4 of the township line between T. 29 S., and T. 28 S., thence west along township line to south section corner of section 34 thence north to northeast corner of NE1/4 SW1/4 thence west to the southwest corner of SW1 /4 NW1/4 SW1/4 thence north along section line between sections 33 and 34 to section corner common to section 33, 34, 27, and 28
				28	R. Rim	Starting at the section corner common to sections 33,34, 27, and 28 north to east quarter corner of section 28 thence west to the southwest corner of the SW1/4 SE1/4 NE1/4 thence north ending at the northwest corner of the NW1/4 NE1/4 NE1/4
				29	L. Rim	Starting at the southeast corner of the SE1/4 SW1/4 SW1/4 thence north to the northwest corner of the NW1/4 NE1/4 SW1/4 thence east to the northeast corner of the NE1/4 NE1/4 SW1/4 where it intersects the identifiable rim and traverses to the north boundary line of the NW1/4 NE1/4 NE1/4 thence east and ending at section common to sections 20, 21, 28, and 29.
13&14 of 17	28	41	W.M.	21	R. Rim	Traverses elevation line 3300 ft. starting at the southwest corner of the SW1/4 SE1/4 SE1/4 to the north boundary line of the NW1/4 NE1/4 SE1/4 SE1/4 thence east ending at the

						east quarter corner of section 21
					L. Rim	Starting at the section corner common to sections 21, 20, 28, and 29 thence east to the southeast corner of the SE1/4 SW1/4 SW1/4 and intersects 3400 ft elevation line and traverses elevation line and ending on the north boundary of the N1/2 NW1/4 NE1/4
14 of 17				22	R. Rim	Starting at the west quarter corner of section 22 east along division line to southeast corner of the SE1/4 SW1/4 NW1/4 thence north along identifiable rim ending at the northeast corner of the NE1/4 NW1/4 NW1/4
				16	L. Rim	Traverses elevation line 3300 ft starting in the S1/2 SW1/4 SE1/4 and ending E1/2 NE1/4 SE1/4
				15	R. Rim	Traverses identifiable rim starting at the southeast corner of the SE1/4 SW1/4 SW1/4 and ending at the E1/2 NE1/4 SE1/4
					L. Rim	Traverses elevation line 3300 ft starting in the W1/2 NW1/4 SW1/4 and ending at the E1/2 SE1/4 NE1/4 thence north along section line and ending in the northeast corner of the NE1/4 SE1/4 NE1/4
				14	R. Rim	Traverses identifiable rim starting at the W1/2 NW1/4 SW1/4 and ending in the E1/2 NE1/4 SE1/4 and starting and ending in the E1/2 NE1/4
					L. Rim	Traverses elevation line 4100 ft starting at the northwest corner of the NW1/4 SW1/4 NW1/4 and ending at the north boundary line of the N1/2 NE1/4 NW1/4
				13	R. Rim	Traverses identifiable rim starting at the NW1/4 NW1/4 SW1/4 and ending in the SW1/4 SW1/4 NW1/4
				11	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the E1/2 SE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in the N1/2 NE1/4 NW1/4
14 of 17	28	41	W.M.	12	R. Rim	Traverses identifiable rim starting and ending in the W1/2 NW1/4
				2	L. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SW1/4 and ending in lot 2
				1	R. Rim	Traverses, identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in

						lot 3
	27	41	W.M.	36	R. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SW1/4 and ending in the E1/2 SE1/4 NE1/4
				35	L. Rim	Traverses identifiable rim starting in the S1/2 SW1/4 SE1/4 and ending in the N1/2 NE1/4 NE1/4
				26	L. Rim	Traverses identifiable rim starting and ending in the SE1/4 SE1/4 SE1/4
				25	R. Rim	Traverses identifiable rim starting in the S1/2 SE1/4 SE1/4 and ending in the E1/2 SE1/4 NE1/4
					L. Rim	Traverses identifiable rim starting and ending in the SW1/4 SW1/4 and starting at the southwest corner of the SW1/4 NW1/4 SW1/4 along north-south section line to the northwest corner of NW1/4 SW1/4 NW1/4 thence east to the southeast corner of the SW1/4 NE1/4 NW1/4 thence, north to section line at northwest corner of NE1/4 NE1/4 NW1/4, thence east along section line and ending at east corner of NE1/4 NW1/4 NE1/4
14 of 17	27	41	W.M.	24	R. Rim	Starting at the southwest corner of the SW1/4 SE1/4 SE1/4 thence north to northwest corner of the NW1/4 SE1/4 SE1/4 thence east ending at northeast corner of the NE1/4 SE1/4 SE1/4
14&15 of 17	27	42	W.M.	19	L. Rim	Starting at the northwest corner of lot 4 thence along subdivision line east ending at the northeast corner of the NE1/4 SE1/4 SE1/4
				30	R. Rim	Traverses identifiable rim starting in lot 2 and ending on the south boundary of the NE1/4 SE1/4 NW1/4 thence east leaving rim at elevation line 3600 ft to a point at the northeast corner of the NW1/4 NW1/4 SE1/4 thence east along subdivision line to east quarter corner of section 30
15 of 17				20	L. Rim	Starts at the west quarter corner thence east to center of section 20 thence north, to the northwest corner of the SW1/4 SW1/4 NE1/4 thence east to northeast corner of the SE1/4 SE1/4 NE1/4 thence south ending at the east quarter corner
				29	R. Rim	Starts at the west quarter corner and ending at the east quarter corner

				28	R. Rim	Starts at the west quarter corner thence east to center of section 28 thence south to the southwest corner of the SW1/4 NW1/4 SE1/4 thence east ending at the southeast corner of the SE1/4 NE1/4 SE1/4
				21	L. Rim	Starts at the west quarter corner and ends at the east quarter corner
				22	L. Rim	Starts at the west quarter corner thence east to center of section 22 thence north to the northwest corner of the NW1/4 SW1/4 NE1/4 thence east ending at the northeast corner of the NE1/4 SE1/4 NE1/4
15 of 17	27	42	W.M.	27	R. Rim	Starts at the southwest corner of the SW1/4 NW1/4 SW1/4 thence east to the southeast corner of the SE1/4 NE1/4 SE1/4 thence north along section line ending at the section corner common to sections 22, 23, 26, and 27
				26	R. Rim	Starts at the section corner common to sections 22, 23, 26, and 27 thence east ending at identifiable rim, then traverses identifiable starting in the NE1/4 NW1/4 NW1/4 and ending in the N1/2 NW1/4 NE1/4 and starting and ending in the NE1/4 NE1/4
				23	R. Rim	Traverses identifiable rim starting and ending in the S1/2 SW1/4 SW1/4 and starting and ending S 1/2 SE1/4
					L. Rim	Starts at the northwest corner of the NW1/4 SW1/4 NW1/4 thence east along subdivision line east to the northeast corner of the NE1/4 SE1/4 NE1/4 thence south along section line ending at the 3900 ft elevation line
				24	L. Rim	Starts in the W1/2 SW1/4 NW1/4 on the 3800 ft elevation line and ends on identifiable rim at the northeast corner of the NW1/4 NE1/4 SW1/4 on the 3400 ft elevation line to identifiable rim in S1/2 SE1/4 SW1/4 starts and ends in the E1 /2 SW1/4 at 3400 ft elevation line
				25	L. Rim	Traverses identifiable rim at 3400 ft elevation starting and ending in the N1/2 N1/2
15 of 17	27	42	W.M.	25	R. Rim	Starts at the northwest corner of the NW1/4 SW1/4 NW1/4 thence south along section line to west quarter corner of section 25 thence east along subdivision line east quarter corner thence north on range line ending at west quarter corner section 19
15 of 17	27	43	W.M.	19	R. Rim	Start at the west quarter corner thence east to the southeast corner of lot 7

						thence north ending at the northeast corner of lot 3
15&16 of 17	27	43	W.M.	18	R. Rim	Starts at the southwest corner of lot 19 thence north to northwest corner of south half of lot 13 thence east to the southeast corner of the SE1/4 NE1/4 SE1/4 thence north along section line between Sections 17 and 18 ending at the section corner common to section 7, 8, 17 and 18.
					L. Rim	Starts at the 3300 ft elevation line at the northwest corner of lot 16 and along identifiable rim and ends at 3200 ft elevation line at middle west line of lot 7 thence north along section line ending at section corner common to sections 7 and 18 on range line
15 of 17				7	L. Rim	Starts at the section corner common to sections 7 and 8 on range line thence north to northwest corner of lot 17 thence east to southeast corner of lot 16 thence north to the northwest corner of lot 15 thence east to southeast corner of lot 7 of section 7 thence north to northeast corner of lot 4 of section 7 thence east along sec. line ending at northeast corner of lot 3
					R. Rim	Starts at section corner common to sections 7, 8, 17 and 18 thence north along section line to section corner common to section 5 & 6, 7 and 8
15&16 of 17	27	43	W.M.	6	L. Rim	Starts at the southwest corner of the lot 49 thence north to the northwest corner of lot 49 thence east to southeast corner of lot 42 thence north to the northwest corner of lot 41 thence east to the southeast corner of lot 38 thence north to the northeast corner of lot 29 thence west to the southwest corner of lot 25 thence north to the northwest corner of lot 25 thence west to the southwest corner of lot 17 thence north to the northwest corner of lot 3 on township line thence west to and ending at the southwest corner of the SE1/4 SE1/4 of Sec. 31 of T. 26 S., R. 43 E
16 & 17 of 17				5	R. Rim	Starts at section corner common to sec.5, 6, 7 and 8 thence east to south quarter corner of sec. 5 thence north to the northwest corner of lot 24 thence west to the southwest corner of lot 20 thence north to the northeast corner of lot 12 thence west to the southwest corner of the southeast quarter of lot 13 thence north to the northwest corner of the southeast quarter of lot 1 on township line thence east to the southwest corner of the SW1/4 SE1/4 of sec. 32 T. 26 S., R. 43 E.
17 of 17	26	43	W.M.	32	R. Rim	Starts at the southwest corner of the SW1/4 SE1/4 thence north to the southwest corner of lot 8 thence east to the southeast corner of lot 8 thence

						north to the northeast corner of lot 8 thence east to east quarter corner of sec. 32 thence north along section line between 32 and 33 to section corner common to 28, 29, 32 and 33
				31	L. Rim	Starts at southwest corner of the SE1/4 SE1/4 of sec 31 thence north to northwest corner of the SE1/4 NE1/4 of sec. 31 thence east to the northeast corner of the SE1/4 NE1/4 ending
17 of 17	26	43	W.M.	32	L. Rim	Starts at northwest corner of lot 6 thence east to the southeast corner of the west half of lot 4 thence north to the northeast corner of the west half of lot 4 ending on sec line
17 of 17	26	43	W.M.	29	L. Rim	Starts at the southwest corner of the east half SE1/4 SW1/4 thence north to the northwest corner of the east half of the NE1/4 SW1/4 thence east to the northeast corner of the east half NE1/4 SW1/4 thence north to the northeast corner of the NE1/4 NW1/4 thence east to the northwest corner of lot 1 on sec line
				28	R. Rim	Start at the section corner common to 28, 29, 32 and 33 thence north to the northwest corner of the SW1/4 NW1/4 SW1/4 thence east to the northeast corner of the SW1/4 NW1/4 SW1/4 thence north to the northwest corner of the NE1/4 SW1/4 NE1/4 thence east to the southeast corner of the SW1/4 NE1/4 NW1/4 thence north to the northeast corner of the NW1/4 NW1/4 NW1/4 ending on section line
17 of 17	26	43	W.M.	21	R. Rim	Starts at the southwest corner of the SE1/4 SE1/4 SW1/4 thence north to the northwest corner of the NE1/4 SE1/4 SW1/4 thence east to the northeast corner of NE1/4 SE1/4 SW1/4 thence north to the northwest corner of NW1/4 SE1/4 thence east to the northeast corner of the NE1/4 SE1/4 thence north to the northeast corner of the NW1/4 NE1/4 ending on sec. line
					L. Rim	Starts at the southwest corner of the NW1/4 NW1/4 thence east to the southeast corner of the W1/2 NW1/4 NW1/4 thence north to the northeast corner of W1/2 NW1/4 NW1/4 thence east on sec line ending at the northeast corner of the NW1/4 NW1/4
17 of 17				20	L. Rim	Start at south quarter corner of sec. 20 thence east on sec. line to the southeast corner of the SW1/4 SE1/4 thence north on subdivision line to northwest corner of the SE1/4 NE1/4 thence east ending at northeast corner of SE1/4 NE1/4

				16	R. Rim	Starts at the southwest corner of the SE1/4 SE1/4 thence north to the northwest corner of the SE1/4 NE1/4 thence east to the northeast corner SE1/4 NE1/4 thence north on section line to corner common to sections 9, 10, 15 and 16 ending
					L. Rim	Starts at the southeast corner of the SW1/4 SW1/4 thence north to the northeast corner of the NW1/4 NW1/4 ending
				9	L. Rim	Starts at the southwest corner of the SE1/4 SW1/4 thence north to the northwest corner of the NE1/4 SW1/4 thence east to the southeast corner of the SW1/4 NE1/4 thence north to the northeast corner of the SW1/4 NE1/4 thence east and ending at the southeast corner of the NE1/4 NE1/4
17 of 17	26	43	W.M.	9/10		The Owyhee Wild River Administrative Boundary terminates on the north/south section line between secs. 9 and 10 and described as starting at corners common to sec. 9, 10, 15 and 16 thence north along section line to the southeast corner of the NE1/4 NE1/4 ending.

Legal Descriptions of Administrative Boundaries
West Little Owyhee River

Map No.	Township South	Range East	Meridian	Section	Description
1 of 8	36	47	W.M.	16	Beginning at the NE corner of the SE of SW, thence west to the NE corner of the SW of SW. Thence southwest to the SW corner of the township.
1 of 8	36	47	W.M.	20	Thence in a southwesterly direction to SW corner of SE of NE. Thence to the center of the SE1/4. Thence to the SE corner of the township.
1 of 8	36	47	W.M.	29	Thence south approximately 0.25 mile along the east section line of the NE of NE. Thence southwesterly to the center of the SE of NE. Thence southeasterly to the SE corner of the SE of NE. Thence south to the SE corner of the NE of SE.
1 of 8	36	47	W.M.	28	Thence in a southeasterly direction to the southeast corner of the SW of SW.
1 of 8	36	47	W.M.	33	Thence southeasterly to the center of the NE of NW. Thence southeasterly to the center of the NE of NW. Thence southeasterly to the southwest corner of the SW of NW.
1 of 8	36	47	W.M.	32	Thence west to the center of sec. 32. Thence southeasterly to the center of the SW of SE. Thence southeasterly to the SE corner of the SW of of SE.
1 of 8	37	47	W.M.	5	Thence south to the center of the NE1/4. Thence southwesterly to the center of the NW of SE. Thence southwesterly to the SW corner of the SE of SW.
1 of 8	37	47	W.M.	8	Thence southwesterly to the SW corner of the NW of NW.
1, 2 & 3 of 8	37	47	W.M.	7	Thence southwesterly to the center of the SE of NE. Thence westerly along the identifiable west rim through the SE of NE, SW of NE, SE of NW, SW of NE, NW of SE, NE of SW, SE of SW, SW of SE, NW of SE, SW of SE, SE of SE, and NE of SE to a point intersecting the North-South (NS) section line between secs. 7 and 8.
2 of 8	37	47	W.M.	8	Thence easterly along the identifiable west rim through the NW of SW, and SW of SW to a point intersecting the NS section line between secs. 7 and 8.
2 of 8	37	47	W.M.	7	Thence along the identifiable rim through the SE of SE to a point intersecting the

					East-West (EW) section line between secs. 7 and 18.
2 & 3 of 8	37	47	W.M.	18	Thence along the identifiable rim through the NE of NE, and SW of NE to the center of the SE of NE. Thence in a southwesterly direction to the SW corner of the SW of SE. Thence west along EW section line between secs. 18 and 19.
3 of 8	37	47	W.M.	19	Thence south 1.00 mile along the center line of the W1/2 to the EW section line between secs. 19 and 30.
3 of 8	37	47	W.M.	30	Thence west to the identifiable rim. Thence southwesterly through the NW of NW, and SW of NW to the NS section line between secs. 30 (T. 37 S., R. 47 E., WM and sec 25 (T. 37 S., R. 46 E., WM).
3 of 8	37	46	W.M.	25	Thence south along the identifiable rim through the SE of NE, NE of SE, and SE of SE to the SE corner of the township.
3 of 8	37	46	W.M.	31	Thence southerly through the NW of NW, SW of NW, and NW of SW to the NS section line between secs. 31 (T. 37 S., R. 47 E., WM) and 36 (T. 37 S., R. 46 E., WM).
3 of 8	37	46	W.M.	36	Thence southwesterly along the identifiable rim through the NE of SE, and SE of SE to a point intersecting the NS section line between secs. 31 (T. 37 S., R. 47 E., WM) and 36 (T. 37 S., R. 46 E., WM).
3 of 8	37	46	W.M.	31	Thence southeasterly along the identifiable rim through the SW of SW to a point intersecting the EW section line between secs. 31 (T. 37 S., R. 47 E., WM) and 6 (T. 38 S., R. 47 E., WM).
2 & 3 of 8	37	47	W.M.	6	Thence southeasterly to the center point of the E1/2 of the township. Thence along the identifiable rim through the SE of NE, and NE of SE to a point intersecting the NS section line between secs. 5 and 6.
2 of 8	38	47	W.M.	5	Thence southerly along the dentifiable rim through the NW of SW, SW of SW, and SE of SW to a point intersecting the EW section line between secs. 5 and 8.
2 of 8	38	47	W.M.	8	Thence southeasterly along the identifiable rim through the NW of NE, NE of NE, SE of NE, and NE of SE to the southeast corner of the NE of SE.
2 of 8	38	47	W.M.	9	Thence southeasterly to the center of SW of SW. Thence south 0.13 mile to a point

					intersecting the EW section line between secs. 9 and 16.
2 of 8	38	47	W.M.	16	Thence south to the center of SW of NW. Thence southwesterly to the SW corner of SW of NW.
2 of 8	38	47	W.M.	17	Thence southwesterly to the SW corner of NE of SE. Thence west to the SW corner of NW of SE. Thence southwesterly to the center of SE of SW. Thence west to the center of the SW of SW. Thence southwesterly to the SW corner of the township.
2, 3 & 4 of 8	38	47	W.M.	19	Thence southwesterly to the center of the township. Thence south to the NE corner of the SE of SW. Thence southwesterly to the center of the SE of SW. Thence southwesterly along the identifiable rim to a point intersecting the EW section line between secs. 19 and 30.
4 of 8	38	47	W.M.	30	Thence southerly along the identifiable rim through the NE of NW, SE of NW, NW of SW, and SW of SW to a point intersecting the EW section line between secs. 30 and 31.
4 of 8	38	47	W.M.	31	Thence southerly along the identifiable rim through the NW of NW, SW of NW, NW of SW, and SW of SW to the section line between secs. 31 (T. 38 S., R. 47 E., WM) and 6 (T. 39 S., R. 47 E., WM).
4 of 8	39	47	W.M.	6	Thence southerly along the identifiable rim through the NW of NW, SW of NW, NW of SW, NE of SW, SE of SW, and SW of SW to the SE corner of the SW of SW.
4 of 8	39	47	W.M.	7	Thence southeasterly to the center of the NE of NW. Thence to the center of the SE of NW. Thence southwesterly to the NW corner of the SW of SW. Thence south to the SW corner of the township.
4 of 8	39	47	W.M.	13	Thence south to the NE corner of the SE of NE. Thence to the center of SE of NE. Thence to the center of the township. Thence west to the NW corner of the NW of SW. Thence south, across Bobs Draw Creek, to the SW corner of the NW of SW. Thence east to the center of the SW1/4. Thence south to the SE corner of the SW of SW.
4 of 8	39	46	W.M.	24	Thence southwesterly to the NW corner of the SW of NW. Thence south across an unnamed creek to the SW corner of the SW of NW. Thence southeasterly across an unnamed creek to the center of the NW of SW. Thence south to a point intersecting the EW section line between secs. 24 and 25.
4 of 8	39	46	W.M.	25	Thence southwesterly to the SW corner of the NW of NW.

4 of 8	39	46	W.M.	26	Thence southwesterly to the identifiable rim of Dry Canyon Creek. Thence northwesterly along the identifiable rim through the SE of NE, SW of NE, and NW of NE to the NS center line of the township. Thence south across Dry Canyon Creek to the identifiable rim. Thence southeasterly along the identifiable rim through the SW of NE, NW of SE, NE of SW, and NW of SE to the center of the NW of SE. Thence southeasterly to the SE corner of the township.
4 of 8	39	46	W.M.	35	Thence south to the SE corner of the NE of NE. Thence west to the center of the NE1/4. Thence southwesterly to the center of the SW of NE. Thence west to the NS section line between secs. 34 and 35.
4 of 8	39	46	W.M.	34	Thence southwesterly to the center of the township. Thence west to the NE corner of the NW of SW. Thence southwesterly to the SW corner of the NW of SW.
4 of 8	39	46	W.M.	33	Thence west to the center of the SE1/4. Thence southwesterly to the SW corner of the SW of SE.
4 of 8	40	46	W.M.	4	Thence southwesterly to the center of the W1/2. Thence west to the NW corner of the NW of SW.
4 & 5 of 8	40	46	W.M.	5	Thence southwesterly to the center of the SE1/4. Thence west to the NW corner of the SW of SW.
5 of 8	40	46	W.M.	6	Thence west to the center of the SE1/4. Thence southeasterly to the SE corner of the township.
5 of 8	40	46	W.M.	7	Thence south to the NW corner of the SE of NW. Thence southwesterly to the center of the E1/2. Thence south to the center of the SE1/4. Thence east to the SE corner of the NE of SE.
5 of 8	40	46	W.M.	8	Thence northeasterly to the center of the NW of NE. Thence east to the center of the NE of NE. Thence northeasterly to the NE corner of the township.
5 of 8	40	46	W.M.	9	Thence southeasterly to the center of the NW1/4. Thence southwesterly to the NW corner of the NW of SW. Thence south to the SW corner of the township.
5 of 8	40	46	W.M.	16	Thence southeasterly to the center of the NE of NW. Thence southeasterly to the NE corner of the SE of NW. Thence south to the center of the township. Thence southwesterly to the center of the SE of SW. Thence southwesterly to the SW corner of

					the SE of SW.
5 of 8	40	46	W.M.	21	Thence southwesterly to the NW corner of the SW of NW.
5 of 8	40	46	W.M.	20	Thence southwesterly to the center of the NE of SE. Thence southwesterly to the SW of SW. Thence southwesterly to the SW corner of the township.
5 & 6 of 8	40	46	W.M.	30	Thence southwesterly to the center of the NE of NE. Thence west to the center of the NE of NW. Thence northwesterly to the NW corner of the NE of NW.
5 & 6 of 8	40	46	W.M.	19	Thence northwesterly to the NW corner of the SW of SW.
6 of 8	40	45	W.M.	24	Thence northwesterly to the center of the E1/2. Thence NW to the center of the NW of NE. Thence southwesterly to the center of the SE of NW. Thence east to the section line between secs. 23 and 24.
6 of 8	40	45	W.M.	23	Thence west to the center of the SW of NE. Thence northwesterly to the NW corner of the NE of NW. Thence south to the center of the NW 1/4. Thence northwesterly to the NW corner of the SW of NW. Thence southwesterly to the center of the SW of NW.
6 of 8	40	45	W.M.	22	Thence northwesterly to the NW corner of the NE of NE. Thence south to the center of the E1/2. Thence along the identifiable rim through the NW of SE, SW of SE, SE of SW, NE of SW, and NW of SW to a point on the section line between secs. 21 and 22.
6 of 8	40	45	W.M.	21	Thence along the identifiable rim through the NE of SE, NW of SE, SW of NE, SE of NW, NE of NW, and NW of NW to the section line between secs. 16 and 21.
6 of 8	40	45	W.M.	16	Thence northwesterly along the identifiable rim through the SW of SW to the NW corner of the SW of SW.
6 of 8	40	45	W.M.	17	Thence westerly along the identifiable rim through the NE of SE and SE of SE to the section line between secs. 17 and 20.
6 of 8	40	45	W.M.	20	Thence along the identifiable rim through the NE of NE, NW of NE, and NE of NW to the center of the NE of NW. Thence northwesterly to the NW corner of NE of NW.
6 of 8	40	45	W.M.	17	Thence northwesterly to the NW corner of the SW of SW.

6 of 8	40	45	W.M.	18	Thence northwesterly to the NW corner of the NE of NW.
6 of 8	40	45	W.M.	7	Thence northwesterly to the NW corner of the SW of SW.
6 & 7 of 8	40	44	W.M.	12	Thence west to the center of the SE1/4. Thence northwesterly to the center of the township. Thence west to the SW corner of the SW of NW.
7 of 8	40	44	W.M.	11	Thence northwesterly to the center of the NE1/4. Thence west to the center of the N1/2. Thence southwesterly to the SW corner of the NW of SW.
7 of 8	40	44	W.M.	10	Thence southwesterly to the SW corner of the SE of SE. Thence west to the SW corner of the SW of SE.
7 of 8	40	44	W.M.	15	Thence south across the Upper West Little Owyhee River to the center of the township. Thence east to the center of the E1/2. Thence northeasterly to the NE corner of the SE of NE.
7 of 8	40	44	W.M.	14	Thence northeasterly to the NE corner of the NW of NW.
7 of 8	40	44	W.M.	11	Thence northeasterly to the center of the S1/2. Thence east to the SE corner of the NE of SE.
7 of 8	40	44	W.M.	12	Thence east to the center of the SW1/4. Thence southeasterly to the SE corner of the SE of SW. Thence east to the SE corner of the SW of SE.
6 of 8	40	44	W.M.	13	Thence southeasterly to the NE corner of the SE of NE.
6 of 8	40	45	W.M.	18	Thence southeasterly to the SE corner of the SW of SE.
6 of 8	40	45	W.M.	19	Thence southeasterly to the SE corner of the NE of NE.
6 of 8	40	45	W.M.	20	Thence southeasterly to the center of the SW of NW. Thence east to the center of the SE of NW. Thence northeasterly to the center of the NE1/4. Thence east to the SE corner of the NE of NE. Thence north to the identifiable rim of the West Little Owyhee River.
6 of 8	40	45	W.M.	21	Thence southeasterly along the identifiable south rim through the NW of NW, SE of NW, NE of SW, NW of SE, SW of SE, and SE of SE to to a point intersecting the NS

					section line between secs. 21 and 22.
6 of 8	40	45	W.M.	22	Thence along the identifiable south rim through the SW of SW to a point intersecting the EW section line between secs. 22 and 27.
6 of 8	40	45	W.M.	27	Thence along the identifiable rim through the NW of NW, NE of NW, and the NW of NE to a point intersecting the EW section line between secs. 22 and 27.
6 of 8	40	45	W.M.	22	Thence along the identifiable rim through the SW of SE, and SE of SE to a point intersecting the NS section line between secs. 22 and 23.
6 of 8	40	45	W.M.	23	Thence along the identifiable rim through the SW of SW to the center of the SW1/4. Thence to the center of the SE of SW. Thence to the center of the SW of SE. Thence to the SE corner of the NE of SE.
6 of 8	40	45	W.M.	24	Thence east to the center of the S1/2. Thence to the SW corner of the SW of SE.
6 of 8	40	45	W.M.	25	Thence southeasterly to the center of the NW of NE. Thence southeasterly to the SE corner of the NE of NE.
5 & 6 of 8	40	46	W.M.	30	Thence southeasterly to the center of the township. Thence southeasterly to the center of the NW of SE. Thence northeasterly to the center of the SE of NE. Thence to a point intersecting the NS section line between secs. 29 and 30.
5 of 8	40	46	W.M.	29	Thence east to the center of the SW of NW. Thence northeasterly to the NE corner of the NE of NW. Thence east to the NE corner of the township. Thence southerly along the identifiable west rim of Jack Creek through the NE of NE, NW of NE, SW of NE, SE of NW, NE of SW, NW of SE, SW of NE, and SE of NE to a point intersecting the NS section line between secs. 28 and 29.
5 of 8	40	46	W.M.	28	Thence easterly along the identifiable rim of Jack Creek through the NW of NW, SW of NW, SE of NW, SW of NW, and NW of NW to a point intersecting the EW section line between secs. 21 and 28.
5 of 8	40	46	W.M.	21	Thence along the identifiable east rim of Jack Creek through the SW of SW, and SE of SW to the center of the SE of SW. Thence north to the center of the SE of NW. Thence northeasterly to the NE corner of the NW of NE.

5 of 8	40	46	W.M.	16	Thence north to the center of the SE1/4. Thence northeasterly to the NE corner of the SE of NE. Thence northwesterly to the NW corner of the NE of NE.
5 of 8	40	46	W.M.	9	Thence northwesterly to the center of the S1/2. Thence north to the center of the township. Thence northeasterly to the center of the SW of NE. Thence north to a point intersecting the EW section line between secs. 4 and 9.
5 of 8	40	46	W.M.	4	Thence north to the center of the SW of SE. Thence northeasterly to the center of the NE of SE. Thence east to a point intersecting the NS section line between secs. 3 and 4.
4 & 5 of 8	40	46	W.M.	3	Thence east to the center of the NW of SW. Thence northeasterly to the center of the NW of NE. Thence north to a point intersecting the EW section line between secs. 3 (T. 40 S., R. 46 E., WM) and 34 (T. 39 S., R. 46 E., WM).
4 of 8	39	46	W.M.	34	Thence north to the center of the SW of SE. Thence northeasterly to the NE corner of the SE of SE.
4 of 8	39	46	W.M.	35	Thence east to the NE corner of the SE of SE.
4 of 8	39	46	W.M.	36	Thence northeasterly to the center of the W1/2. Thence northeasterly to the center of the NE of NW. Thence northwesterly to the NW corner of the NE of NW.
4 of 8	39	46	W.M.	25	Thence north to the center of the SW1/4. Thence northeasterly to the NE corner of the NE of NW.
4 of 8	39	46	W.M.	24	Thence northeasterly to the center of the SW of SE. Thence northerly along the identifiable east rim of the West Little Owyhee River to the NE corner of the township.
4 of 8	39	47	W.M.	18	Thence northeasterly to the center of the SW of SW. Thence north to the center of the SW of NW. Thence northeasterly to the NE corner of the NE of NW.
4 & 8 of 8	39	47	W.M.	7	Thence northeasterly to the center of the SW of SE. Thence north to the center of the SW of NE. Thence southeasterly along the identifiable rim of an unnamed tributary through the SW of NE and NE of SE across an unnamed tributary at the confluence of three unnamed drainages. Thence through the SE of NE and NW of NE to a point intersecting the EW section line between secs. 6 and 7.

4 of 8	39	47	W.M.	6	Thence along the east identifiable rim through the SW of SE, SE of SW, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 6 (T. 39 S., R. 47 E., WM) and 31 (T. 38 S., R. 47 E., WM).
4 of 8	38	47	W.M.	31	Thence northerly along the east identifiable rim through the SE of SW, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 30 & 31.
4 & 8 of 8	38	47	W.M.	30	Thence northerly along the identifiable rim through the SE of SW, NE of SW, SE of NW, SW of NE, and NW of NE to a point intersecting the EW section line between secs. 19 and 30. Thence east to the NE corner of the NW of NE.
2 & 8 of 8	38	47	W.M.	19	Thence northeasterly to the center of the NE of SE. Thence northeasterly to the NE corner of the NE of SE.
2 of 8	38	47	W.M.	20	Thence northeasterly along the identifiable rim through the SW of NW, NW of NW, NE of NW, SE of NW, SW of NE, NW of NE, NE of NW, and NW of NE to a point intersecting the EW section line between secs. 17 and 20.
2 of 8	38	47	W.M.	17	Thence along the identifiable rim through the SW of SE to a point intersecting the EW section line between secs. 17 and 20.
2 of 8	38	47	W.M.	20	Thence easterly along the identifiable rim through the NW of NE and NE of NE to a point intersecting the EW section line between secs. 17 and 20.
2 of 8	38	47	W.M.	17	Thence northeasterly along the identifiable rim through the SE of SE to a point intersecting the NS section line between secs. 16 and 17.
2 of 8	38	47	W.M.	16	Thence northeasterly along the identifiable rim through the SW of SW, NW of SW, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 9 and 16.
2 of 8	38	47	W.M.	9	Thence northerly along the identifiable rim through the SE of SW, SW of SE, SE of SW, NW of SE, NE of SW, NW of SW, SW of NW, and NW of NW to a point intersecting the EW section line between secs. 4 and 9.
2 of 8	38	47	W.M.	4	Thence northerly along the identifiable rim through the SW of SW to a point intersecting the NS section line between secs. 4 and 5.

2 of 8	38	47	W.M	5	Thence northwesterly along the identifiable rim through the SE of SE, SW of SE, NW of SE, NE of SW, SE of NW, SW of NW, and NW of NW to a point intersecting the NS section line between secs. 5 and 6.
2 of 8	38	47	W.M.	6	Thence northwesterly along the identifiable rim through the NE of NE, SE of NE, NE of NE, and NW of NE to a point intersecting the EW section line between secs. 6 (T. 38 S., R. 47 E., WM) and 31 (T. 37 S., R. 47 E., WM).
2 & 3 of 8	37	47	W.M	31	Thence northwesterly along the identifiable rim through the SW of SE, SE of SW, SW of SE, NW of SE, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 30 and 31.
2 & 3 of 8	37	47	W.M.	30	Thence northerly along the identifiable rim through the SE of SW, NW of SW, SW of NW, SE of NW, and NW of NE to a point intersecting the EW section line between secs. 19 and 30. Thence east to the NE corner of the NW of NE.
2 of 8	37	47	W.M.	19	Thence north across Little Spring Creek to the identifiable rim. Thence northwesterly through the SW of SE, NW of SE, NE of SE, SE of NE, and NE of NE to a point intersecting the EW section line between secs. 18 and 19.
2 of 8	37	47	W.M.	8	Thence northeasterly along the identifiable rim through the to a point intersecting the EW section line between secs. 17 and 18.
2 of 8	37	47	W.M.	17	Thence northeasterly along the identifiable rim through the SW of SW, NW of SW, SE of NW, NE of NW, SE of NW, and NE of NW to a point intersecting the NS section line between secs. 8 and 17.
1 & 2 of 8	37	47	W.M.	8	Thence northerly along the identifiable rim through the SE of SW, NE of SW, NW of SE, SE of NW, SW of NE, and NW of NE to a point intersecting the EW section line between secs. 5 and 8.
1 of 8	37	47	W.M.	5	Thence northeasterly to the NE corner of the SE of SE.
1 of 8	37	47	W.M.	4	Thence northeasterly to the center of the NW of SW. Thence northeasterly to the NE corner of the NW of NW. Thence east to the identifiable rim of Toppin Creek. Thence southeasterly along the identifiable rim through the NE of NE to a point intersecting the NS section line between secs. 3 and 4.

1 of 8	37	47	W.M.	3	Thence southeasterly along the identifiable rim of Toppin Creek through the NW of NW, SW of NW, NW of SW, NE of SW, and SE of SW to a point intersecting the EW section line between secs. 3 and 10.
1 & 2 of 8	37	47	W.M.	10	Thence southeasterly along the identifiable rim through the NW of NE, NE of NW, NW of NE, SW of NE, NW of NE, NE of NE, and SE of NE to a point intersecting the NS section line between secs. 10 and 11. Thence south to the NE corner of the SE of SE.
1 & 2 of 8	37	47	W.M.	11	Thence southeasterly along the identifiable rim through the SW of SW to a point intersecting the EW section line between secs. 11 and 14.
2 of 8	37	47	W.M.	14	Thence along the identifiable rim through the NW of NW, and NE of NW to a point intersecting the EW section line between secs. 11 and 14.
2 of 8	37	47	W.M.	11	Thence along the identifiable rim through the SE of SW to a point intersecting the EW section line between secs. 11 and 14.
2 of 8	37	47	W.M.	14	Thence southeasterly along the identifiable rim through the NE of NW, NW of NE, SW of NE, NW of SE, SW of SE, SE of SE, and SW of SE to a point intersecting the EW section line between secs. 14 and 23. Thence east across Toppin Creek to the east identifiable rim. Thence northerly through the SE of SE, NW of SE, SW of NE, SE of NE, NE of NE, and NW of NE to a point intersecting the EW section line between secs. 11 and 14.
1 & 2 of 8	37	47	W.M.	11	Thence northwesterly through the SW of SE, SE of SW, NE of SW, NW of SW, SW of NW, and NW of NW to a point intersecting the EW section line between secs. 2 and 11.
1 of 8	37	47	W.M.	2	Thence northwesterly along the identifiable rim through the SW of SW to a point intersecting the NS section line between secs. 2 and 3.
1 of 8	37	47	W.M.	3	Thence northwesterly along the identifiable rim through the SE of SE, SW of SE, NW of SE, NE of SW, SE of NW, and NE of NW to a point intersecting the EW section line between secs. 3 (T. 37 S., R. 47 E., WM) and 34 (T. 36 S., R. 47 E., WM).
1 of 8	36	47	W.M.	34	Thence northwesterly along the identifiable rim through the SW of SW, NW of SW, and SW of NW to a point intersecting the NS section line between secs. 33 and 34.

1 of 8	36	47	W.M.	33	Thence northwesterly along the identifiable rim at the confluence of Toppin Creek and the West Little Owyhee River, through the SE of NE, and NE of NE to a point intersecting the EW section line between secs. 28 and 33.
1 of 8	36	47	W.M.	28	Thence northerly along the identifiable rim through the SE of SE, SW of SE, NW of SE, SW of NE, and NW of NE to a point intersecting the EW sec line between secs. 21 and 28.
1 of 8	36	47	W.M.	21	Thence northerly along the identifiable rim through the SW of SE, NW of SE, and NE of SW to the center of the township. Thence northeasterly to the NE corner of the township.
1 of 8	36	47	W.M.	16	Thence north to NE corner of SE of SE, along the identifiable rim through NE of SE, and NW of SE to EW center line of S1/2. Thence west to NE corner of SE of SW.

Legal Descriptions of Administrative Boundaries
North Fork Owyhee River

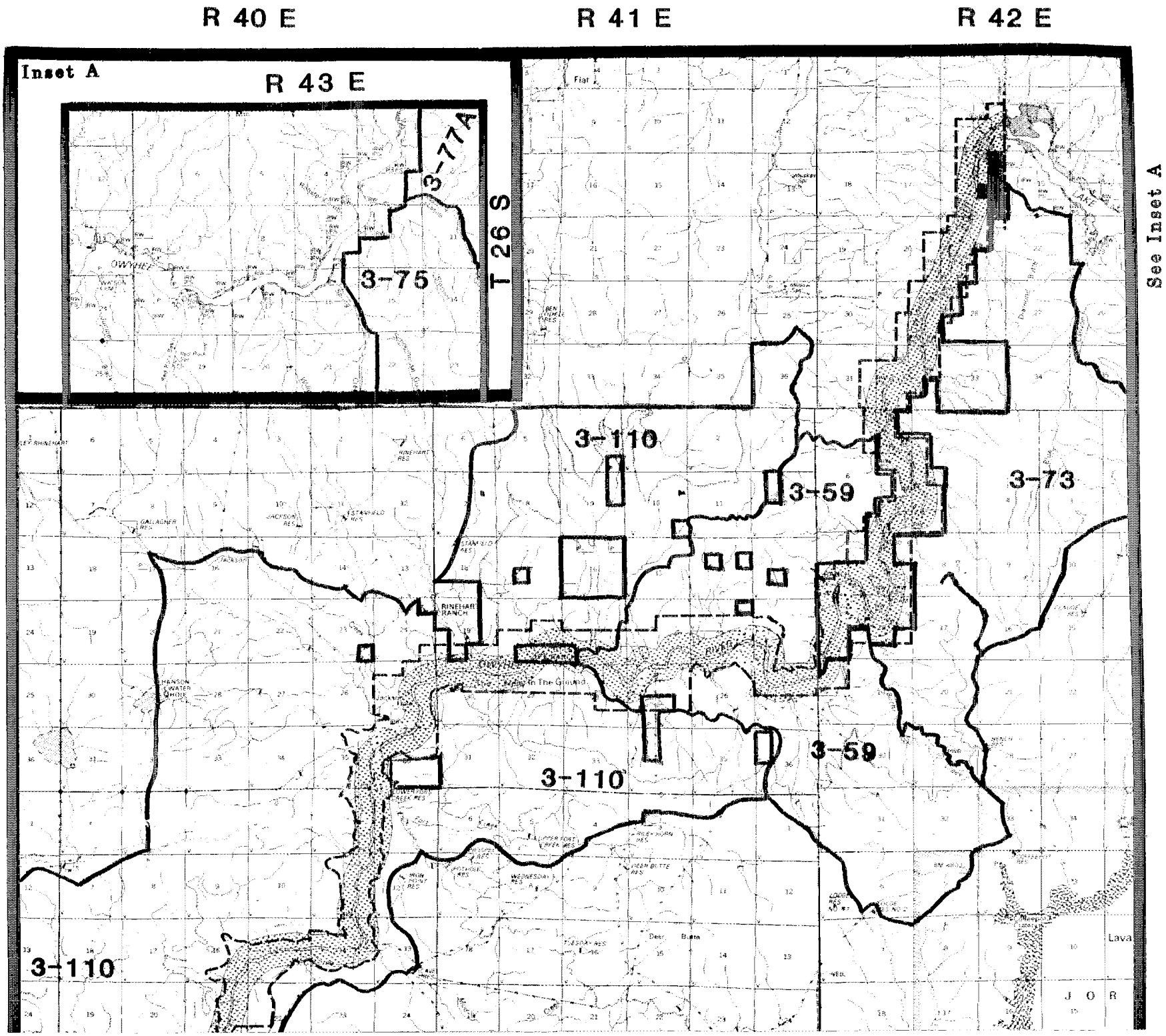
Map No.	Township South	Range East	Meridian	Section	Description
1 of 2	34	46	W.M.	25	Beginning at the Oregon-Idaho State line, thence traverse the identifiable rim through lot 2 to a point intersecting the North-South (NS) section line between secs. 25 and 26.
1 of 2	34	46	W.M.	26	Thence along the identifiable north rim through the SE of NE, SW of NE, NW of NE, NE of NW, SE of NW, NE of SW, and NW of SW to a point intersecting the NS section line between secs. 26 and 27.
1 of 2	34	46	W.M.	27	Thence along the identifiable rim through the NE of SE, NW of SE, NE of SW, and SW of NW to a point intersecting the NS section line between secs. 27 and 28.
1 of 2	34	46	W.M.	28	Thence along the identifiable rim through the SE of NE, SW of NE, and SE of NW. Thence north along the east identifiable rim of Cherry Creek SW of NW, and NW of NW to a point intersecting the East-West (EW) section line between secs. 21 and 28.
1 of 2	34	46	W.M.	21	Thence along the identifiable east rim of Cherry Creek through the SW of SW, SE of SW, NE of SW, NW of SE, SE of NW, and NE of NW. Thence west across Cherry Creek to the west identifiable rim. Thence south along the west identifiable rim of Cherry Creek SE of NW, NE of SW, SE of SW, and SW of SW to a point intersecting the NS section line between secs. 20 and 21.
1 of 2	34	46	W.M.	20	Thence along the identifiable west rim of Cherry Creek to the EW section line between secs. 20 and 29.
1 of 2	34	46	W.M.	29	Thence south along the identifiable rim of Cherry Creek through the NE of NE, and SE of NE. Thence west along the identifiable rim of the North Fork of the Owyhee River through the NE of SE, NW of SE, NE of SW, and NW of SW to a point intersecting the NS section line between secs. 29 and 30.
1 of 2	34	46	W.M.	30	Thence along the identifiable rim through the NE of SE, NW of SE, and SE of SW to a point intersecting the EW section line between secs. 30 and 31.
1 of 2	34	46	W.M.	31	Thence along the identifiable rim through lot 1 to a point intersecting the NS section line

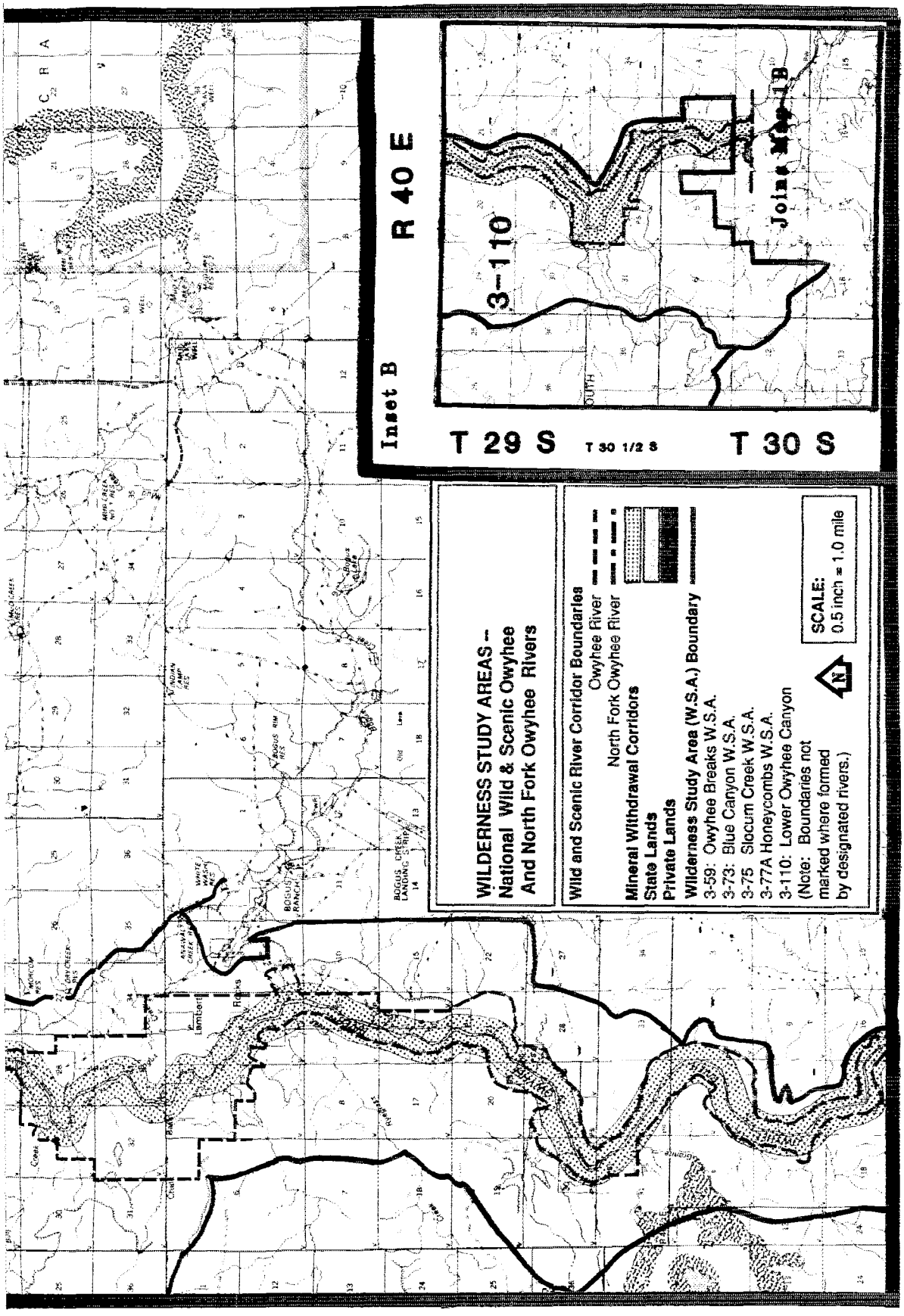
					between secs 31 (T. 35 S., R. 45 E., and 36 (T. 34 S., R. 45 E., WM).
2 of 2	34	45	W.M.	36	Thence along the identifiable rim through the NE of NE, SE of NE, SW of NE, SE of NW, and SW of NW to a point intersecting the NS section line between secs. 35 and 36. Thence south approximately 0.50 mile along the NS section line between secs. 35 and 36.
2 of 2	34	45	W.M.	35	Thence west down the center of NE of SE, NW of SE, and NE of SW to the west section line. Thence south approximately 0.38 mile across the North Fork of the Owyhee River to the SE corner of SW of SW. Thence west approximately 0.06 mile along the EW section line between secs 35 (T. 34 S., R. 45 E., WM) and 2 (T. 35 S., R. 45 E., WM).
2 of 2	35	45	W.M.	2	Thence south approximately 0.13 mile to the west section line of the center of NW of NW. Thence east down the center of NW of NW, NE of NW, NW of NE, and NE of NE to a point intersecting the NS section line between secs. 1 and 2.
2 of 2	35	45	W.M.	1	Thence east down the center of NW of NW, NE of NW, NW of NE, and NE of NE to the NS section line between secs. 1 (T. 35 S., R. 45 E., WM) and 6 (T. 35 S., R. 46 E., WM).
1 & 2 of 2	35	46	W.M.	6	Thence east approximately 0.29 mile to the identifiable rim. Thence north along the identifiable rim through the NE of NW to the EW section line between secs. 6 (T. 35 S., R. 46 E., WM) and 31 (T. 34 S., R. 46 E., WM).
1 of 2	34	46	W.M.	31	Thence northeast along the identifiable south rim through the SE of SW, and SW of SE to the section line between secs. 6 (T. 35 S., R. 46 E., WM) and 31 (T. 34 S., R. 46 E., WM).
1 of 2	35	46	W.M.	6	Thence southerly along the identifiable rim through the NE of NE to the EW section line between secs. 6 (T. 35 S., R. 46 E., WM) and 31 (T. 34 S., R. 46 E., WM).
1 of 2	35	46	W.M.	31	Thence along the identifiable rim through the SE of SE to the NS section line between secs. 31 and 32.
1 of 2	34	46	W.M.	32	Thence along the identifiable rim through the SW of SW, NW of SW, SW of NW, NW of NW, NE of NW, NW of NE, and NE of NE to the NE corner of sec. 32.

1 of 2	34	46	W.M.	28	Thence along the identifiable rim through the SW of SW, SE of SW, SW of SE, and SE of SE to the NS section line between secs. 27 and 28.
1 of 2	34	46	W.M.	27	Thence along the identifiable rim through the SW of SW, and SE of SW to the EW section line between secs. 27 and 34.
1 of 2	34	46	W.M.	34	Thence along the identifiable rim through the NE of NW, NW of NE, SW of NE, NW of SE, NE of SE, SW of NE, NW of NE, and NE of NE to the EW section line between secs. 27 and 34.
1 of 2	34	46	W.M.	27	Thence along the identifiable rim through the SE of SE to the NS section line between secs. 26 and 27.
1 of 2	34	46	W.M.	26	Thence along the identifiable rim through the SW of SW to the EW section line between secs. 26 and 35.
1 of 2	34	46	W.M.	35	Thence along the identifiable rim through the NW of NW, NE of NW, NW of NE, SW of NE, and SE of NE to the NS section line between secs. 35 and 36.
1 of 2	34	46	W.M.	36	Thence along the identifiable rim through lot 2 to the Oregon-Idaho State line. Thence north approximately 0.06 mile. Thence west through lot 2 to the section line between secs. 35 and 36.
1 of 2	34	46	W.M.	35	Thence west along the identifiable rim through the SE of NE, NE of NE, NW of NE, and NE of NW to the EW section line between secs. 26 and 35.
1 of 2	34	46	W.M.	26	Thence along the identifiable rim through the SE of SW, NE of SW, SW of NE, NW of SE, and NE of SE to the section line between Secs. 25 and 26.
1 of 2	34	46	W.M.	25	Thence along the identifiable rim through lot 3 and lot 2 to the Oregon-Idaho border. Thence north approximately 0.13 mile.

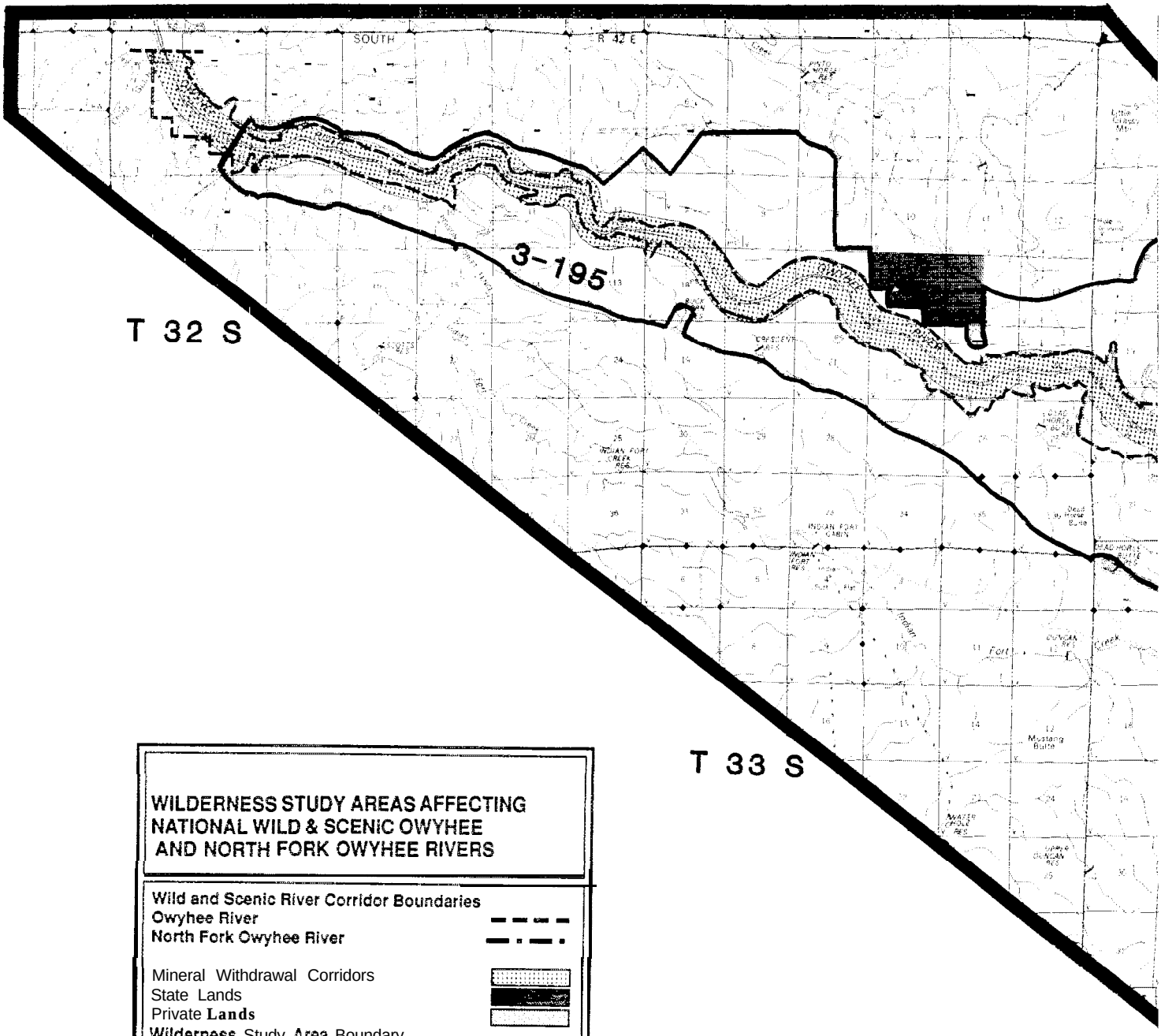
Appendix J

Maps


R 40 E
R 41 E
R 42 E
Inset A
R 43 E
3-77A
3-75
T 26 S
See Inset A
3-110
3-59
3-73
3-59
3-110
3-110
T 26 S
T 27 S
T 28 S


WILDERNESS STUDY AREAS --
National Wild & Scenic Owyhee
And North Fork Owyhee Rivers
Wild and Scenic River Corridor Boundaries
Owyhee River
North Fork Owyhee River
Mineral Withdrawal Corridors
State Lands
Private Lands
Wilderness Study Area (W.S.A.) Boundary
3-59: Owyhee Breaks W.S.A.
3-73: Blue Canyon W.S.A.
3-75 Slocum Creek W.S.A.
3-77A Honeycombs W.S.A.
3-110: Lower Owyhee Canyon
(Note: Boundaries not
marked where formed
by designated rivers.)
N
SCALE:
0.5 inch = 1.0 mile
Inset B
R 40 E
3-110
T 29 S
T 30 1/2 S
T 30 S
See Inset B
T 29 S
T 30 S

R 41 E Joins Map 1A R 42 E R 43 E



WILDERNESS STUDY AREAS AFFECTING NATIONAL WILD & SCENIC OWYHEE AND NORTH FORK OWYHEE RIVERS

Wild and Scenic River Corridor Boundaries
Owyhee River
North Fork Owyhee River

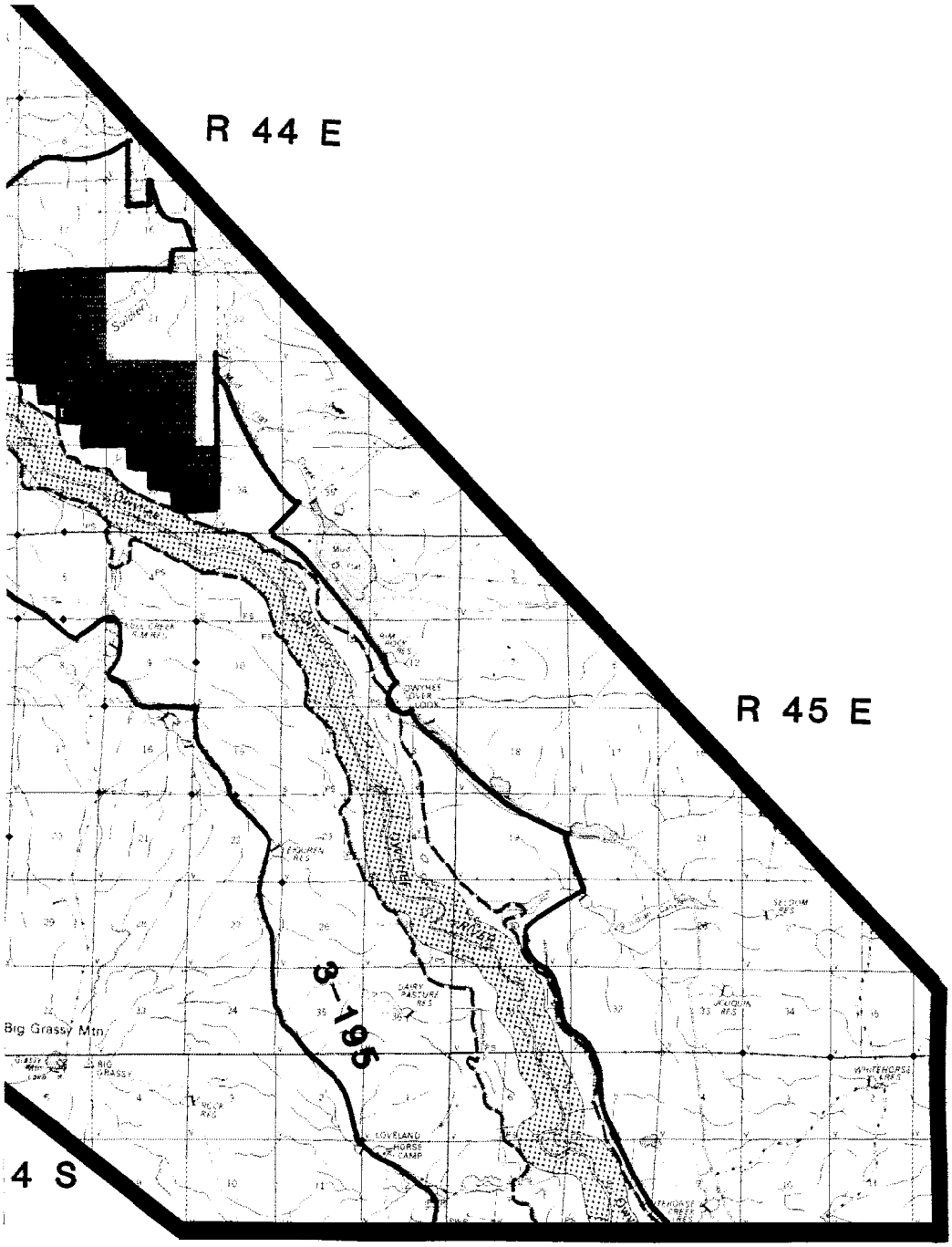
Mineral Withdrawal Corridors
State Lands
Private Lands
Wilderness Study Area Boundary

3-195: Owyhee Canyon W S.A.

(Note: Boundaries not marked where formed by designated rivers)

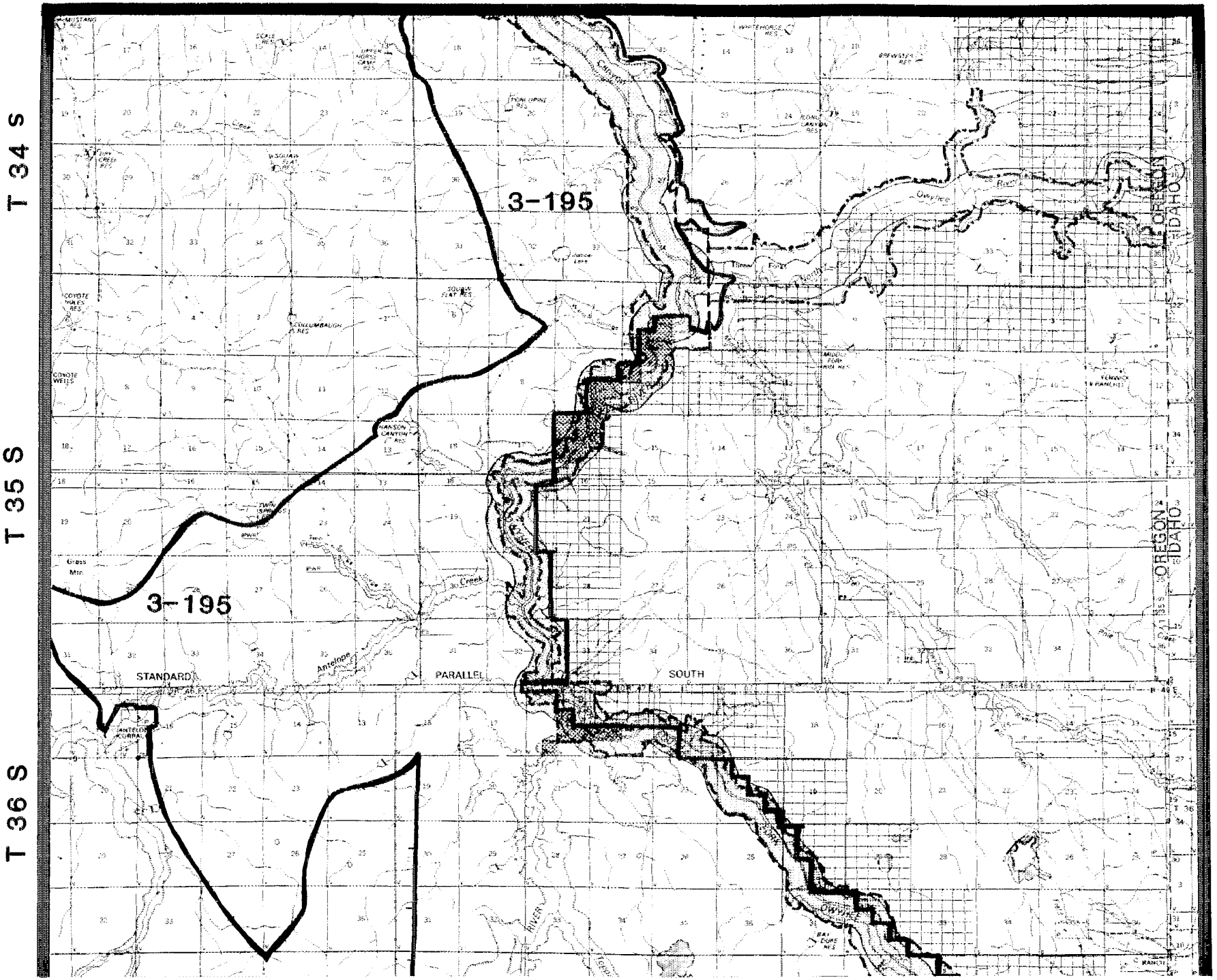
N

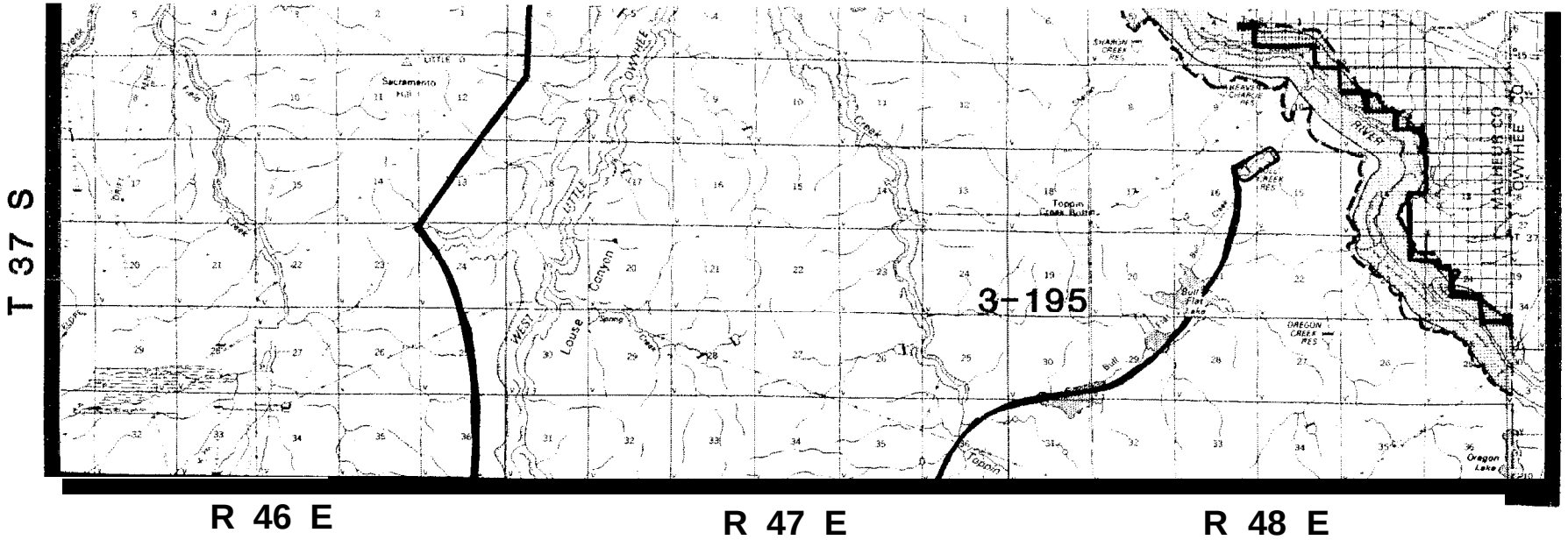
SCALE:
0.5 inch = 1.0 mile



Joins Map 1C

Joins Map 1-B


T 34 S
T 35 S
T 36 S
3-195
3-195
STANDARD
PARALLEL
SOUTH
OREGON
IDAHO
OREGON
IDAHO



Map 1 - C

WILDERNESS STUDY AREAS –
National Wild and Scenic Owyhee and North Fork Owyhee Rivers

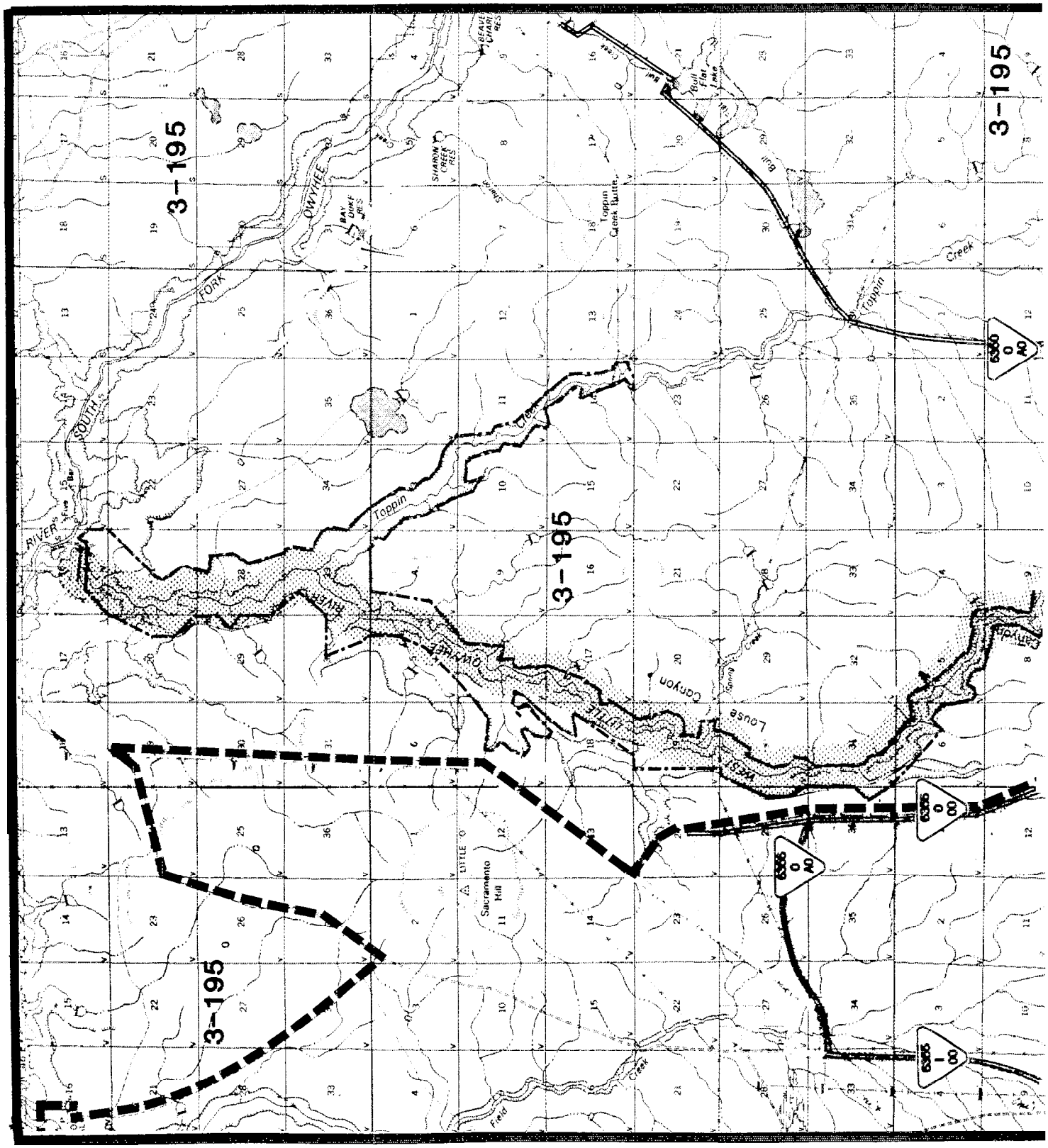
Wild and Scenic River Corridor Boundaries
Owyhee River
North Fork Owyhee River
Mineral Withdrawal Corridors
State Lands
Private Lands

Wilderness Study Area Boundary
(Note: Boundaries not marked where formed by designated rivers.)
3-I 95: Qwyhee Canyon W.S.A.

N

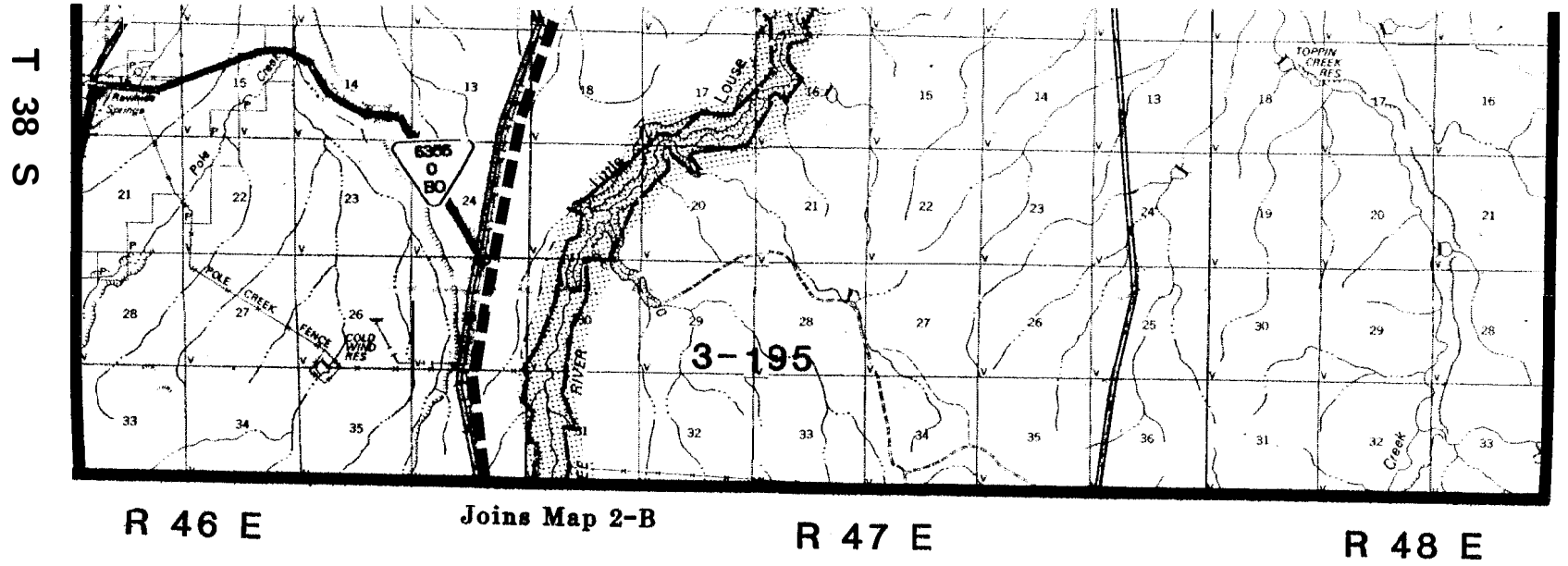
SCALE:
0.5 inch = 1.0 mile

Map 1–C


3-195
3-195
3-195
3-195
SOUTH FORK
OWYHEE
RIVER
Toppin Creek
Toppin Creek Butte
Bull Flat Lake
Bull Creek
SHARON CREEK RES
BEAVER CREEK RES
BAY DUKE RES
WEST
LITTLE
OWYHEE
RIVER
Louse Canyon
Sacramento Hill
LITTLE O
Field Creek
Spring Creek
Spring
Cow Creek
Five Bar
6366
0
AD
6366
0
00
6366
0
AD
6366
-00

T 36 S

T 37 s



WILDERNESS STUDY AREAS--
National Wild and Scenic
West Little Owyhee River

Wild & Scenic River Corridor Boundary
Mineral Withdrawal Corridor
Wilderness Study Area (W.S.A.) Boundary
(Note: Boundaries not marked where formed by designated rivers.)
3-195: Owyhee Canyon W.S.A.
Primary Access Route
Other Routes

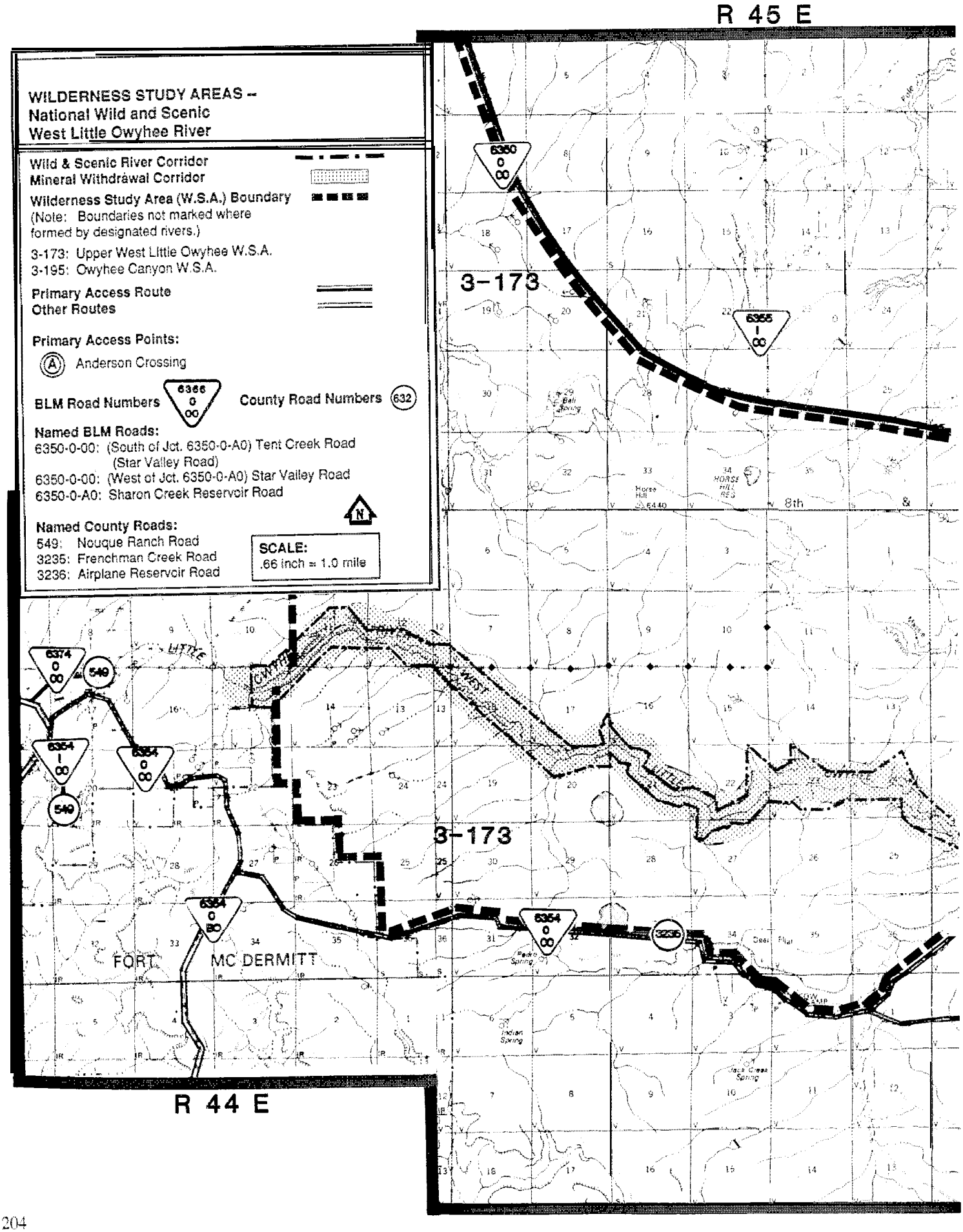
BLM Road Numbers 6366 0 00 **County Road Numbers** 632

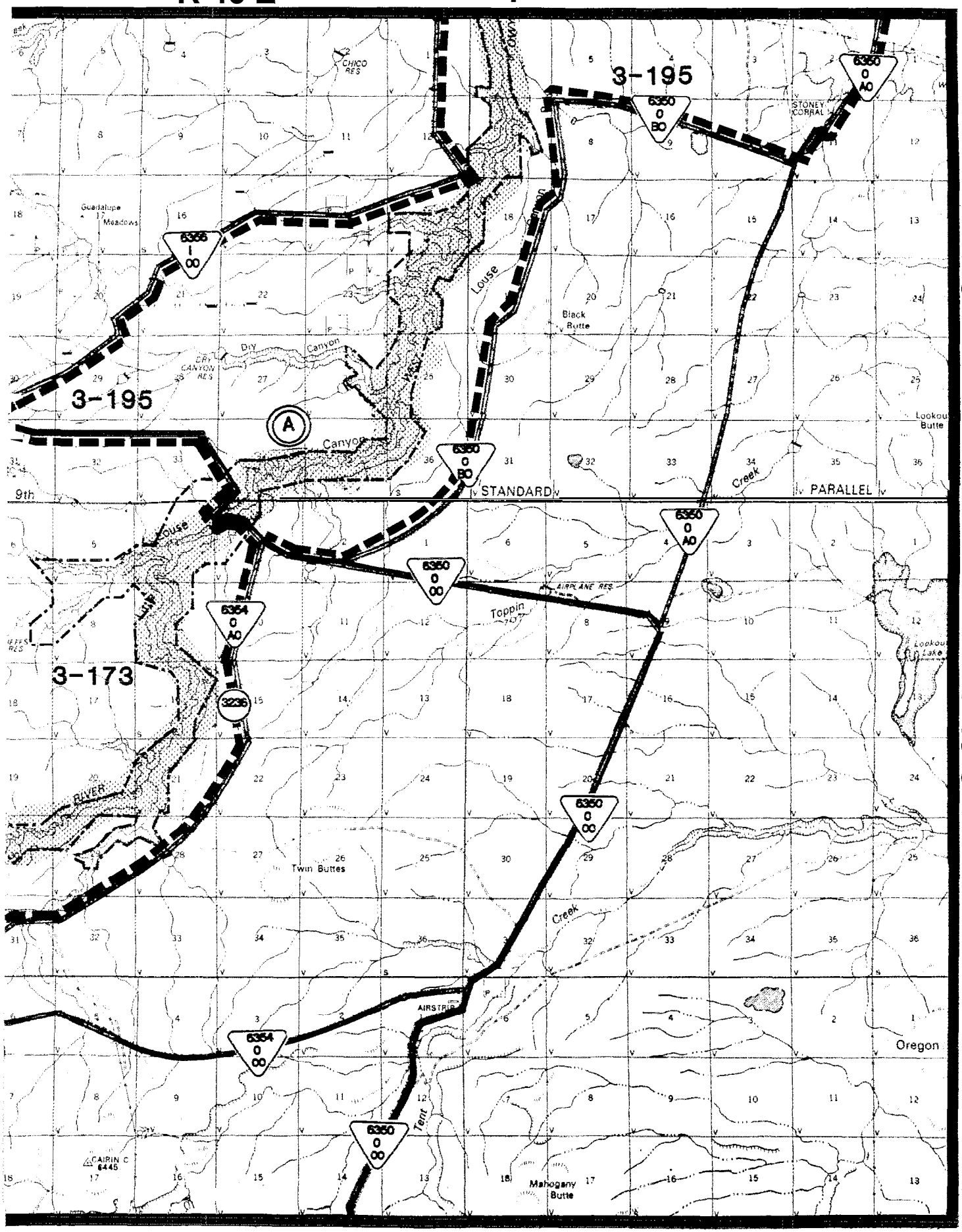
Named BLM Roads:
6350-0-A0: Sharon Creek Reservoir Road (Stoney Corral Road)

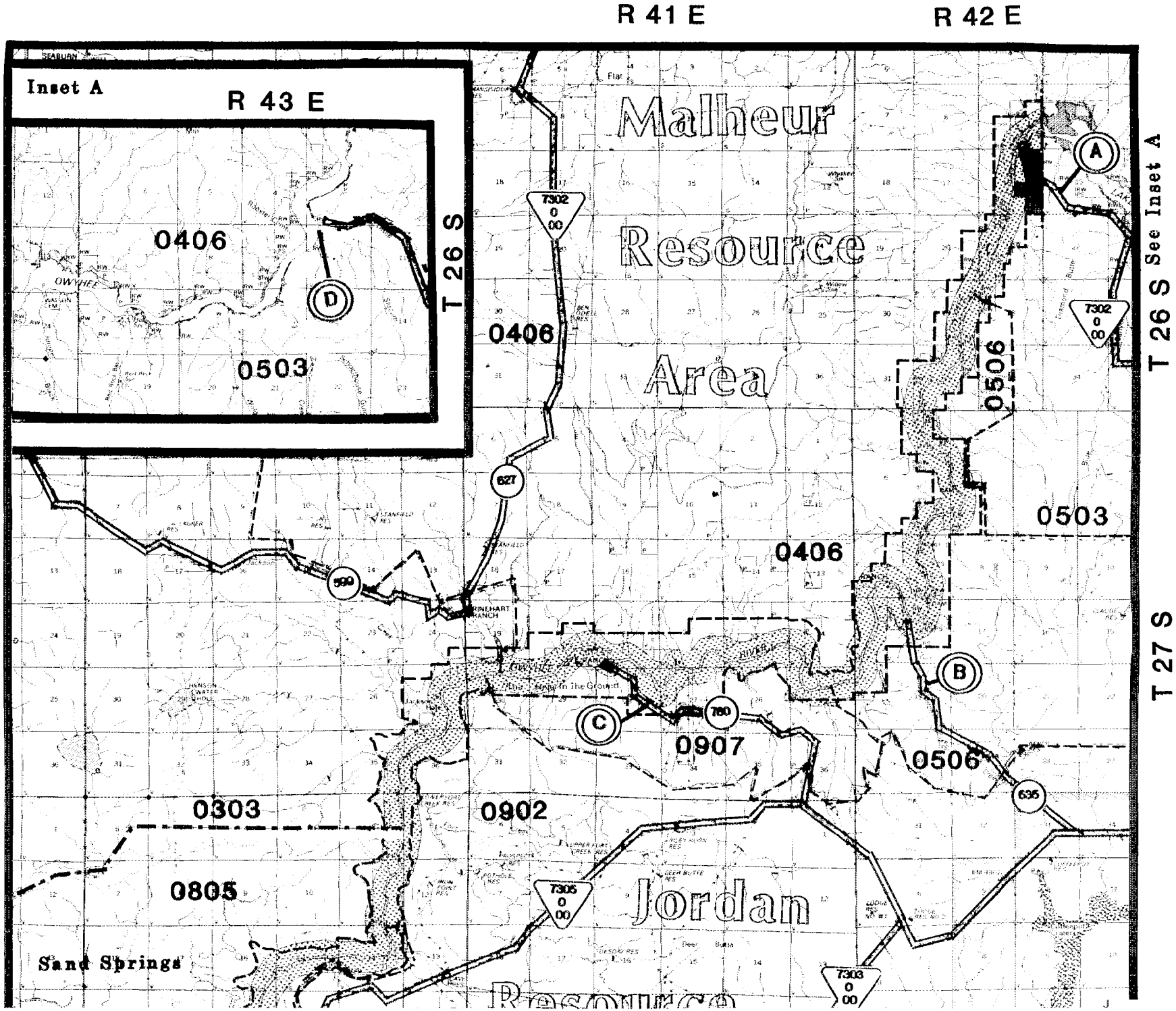
N

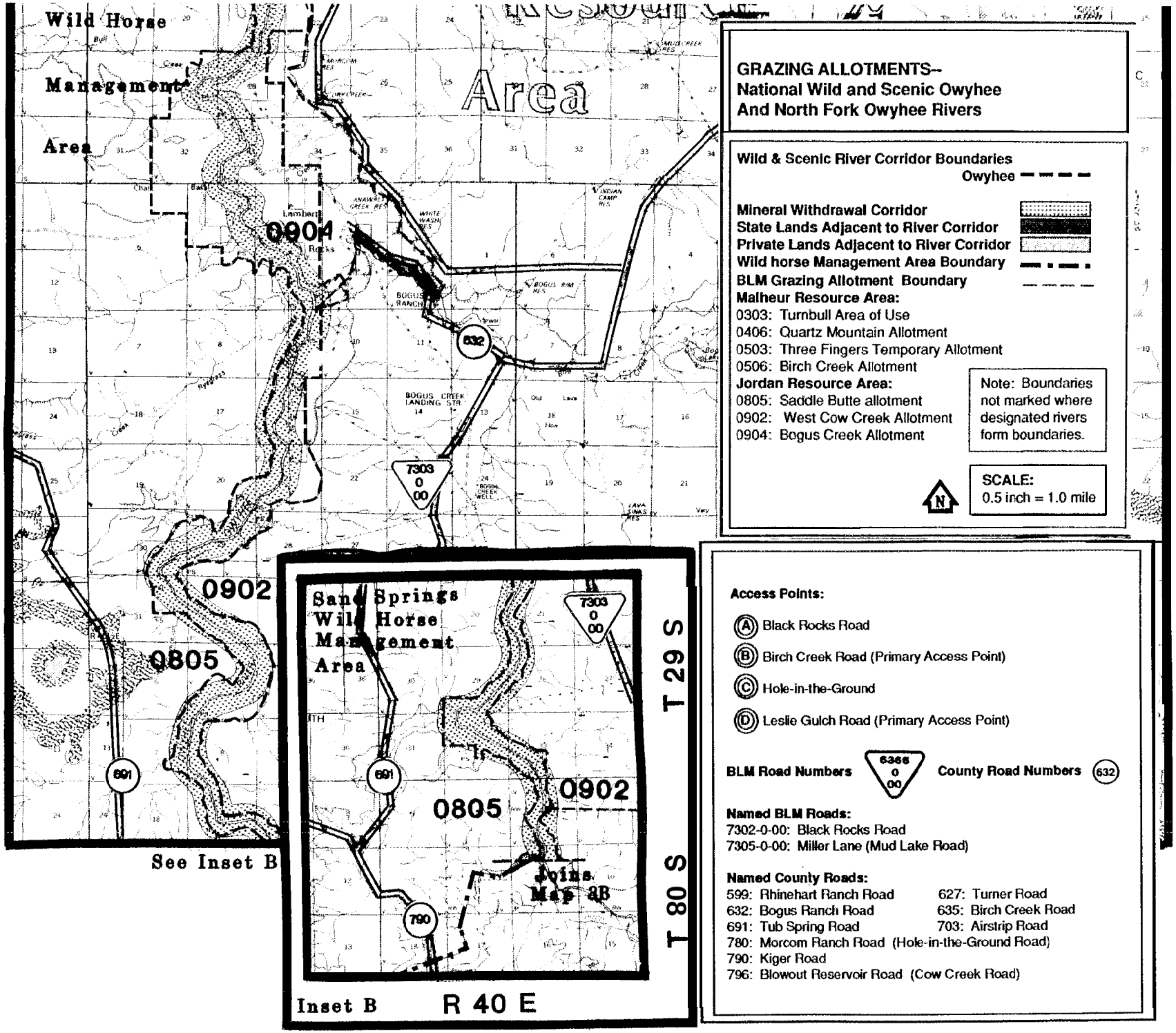
SCALE:
.66 inch = 1.0 mile

MAP 2-A

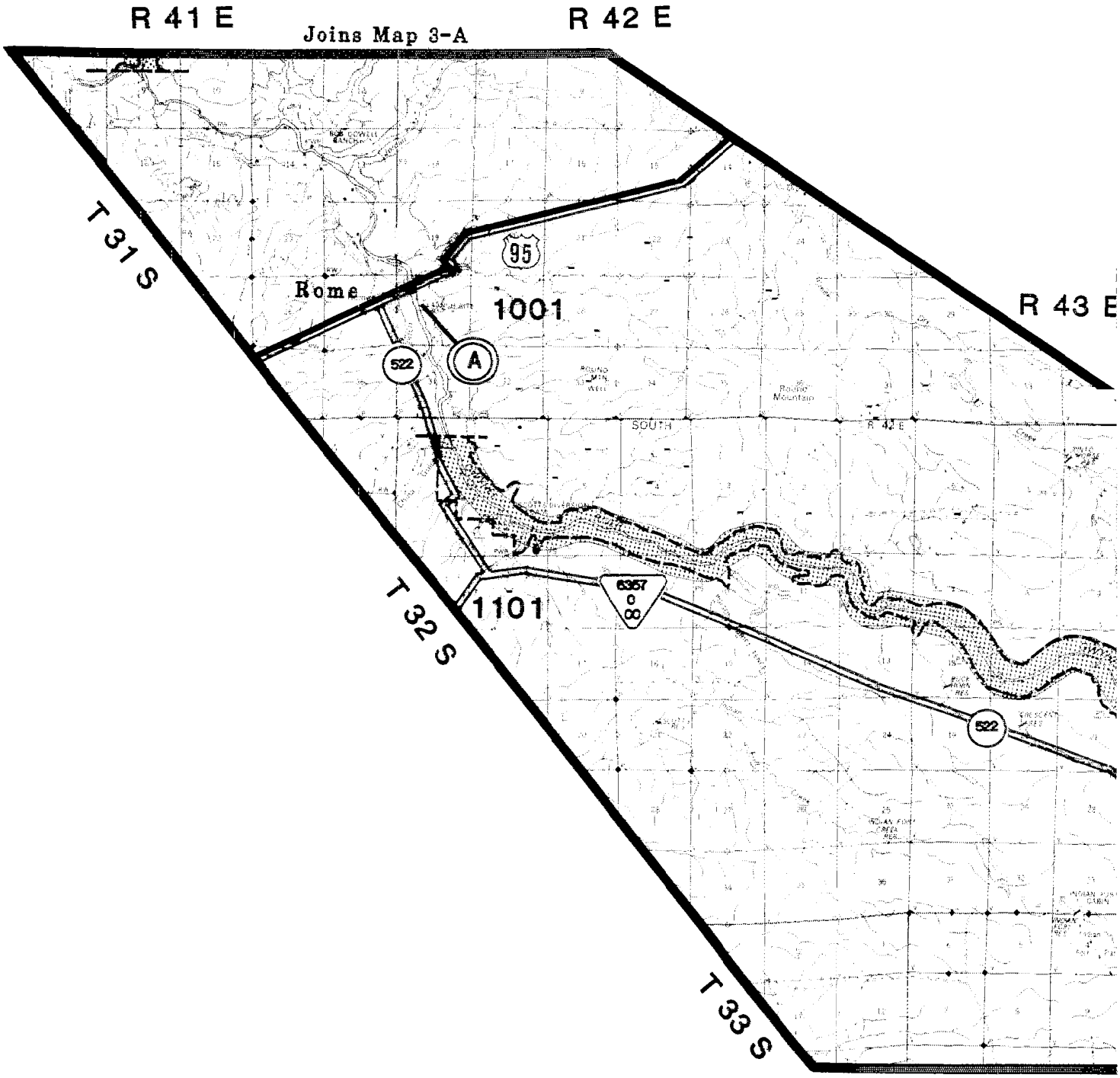

R 45 E
WILDERNESS STUDY AREAS --
National Wild and Scenic
West Little Owyhee River
Wild & Scenic River Corridor
Mineral Withdrawal Corridor
Wilderness Study Area (W.S.A.) Boundary
(Note: Boundaries not marked where formed by designated rivers.)
3-173: Upper West Little Owyhee W.S.A.
3-195: Owyhee Canyon W.S.A.
Primary Access Route
Other Routes
Primary Access Points:
Anderson Crossing
BLM Road Numbers
County Road Numbers
Named BLM Roads:
6350-0-00: (South of Jct. 6350-0-A0) Tent Creek Road (Star Valley Road)
6350-0-00: (West of Jct. 6350-0-A0) Star Valley Road
6350-0-A0: Sharon Creek Reservoir Road
Named County Roads:
549: Nouque Ranch Road
3235: Frenchman Creek Road
3236: Airplane Reservoir Road
SCALE:
.66 inch = 1.0 mile
3-173
3-173
FORT MC DERMITT
R 44 E


3-195
3-195
3-173
6360 O BO
6360 O AO
6360 O OO
6365 I OO
6354 O AO
6354 O OO
3236
A
CHICO RES
STONEY CORRAL
Guadalupe Meadows
Dry Canyon
Canyon
Louse
Black Butte
Lookout Butte
9th
STANDARD
PARALLEL
Creek
Toppin
AIRPLANE RES
Lookout Lake
Twin Buttes
Creek
AIRSTRIP
Oregon
Tent
CAIRN C 6445
Mahogany Butte
T 39 S
T 40 S
T 41 S


R 41 E
R 42 E
Inset A
R 43 E
0406
0503
T 26 S
Malheur
Resource
Area
0406
0506
0503
0406
0907
0506
0303
0902
0805
Jordan
Resource
Sand Springs
T 26 S See Inset A
T 27 S
A
B
C
D
7302
0
00
627
599
780
635
7305
0
00
7303
0
00


Wild Horse
Management
Area
Area
0904
0902
0805
632
691
7303
0
00
See Inset B
Sand Springs
Wild Horse
Management
Area
691
790
0805
0902
Joins
Map 3B
Inset B
R 40 E
T 29 S
T 80 S
T 28 S
T 29 S
T 30 S
GRAZING ALLOTMENTS--
National Wild and Scenic Owyhee
And North Fork Owyhee Rivers
Wild & Scenic River Corridor Boundaries
Owyhee
Mineral Withdrawal Corridor
State Lands Adjacent to River Corridor
Private Lands Adjacent to River Corridor
Wild horse Management Area Boundary
BLM Grazing Allotment Boundary
Malheur Resource Area:
0303: Turnbull Area of Use
0406: Quartz Mountain Allotment
0503: Three Fingers Temporary Allotment
0506: Birch Creek Allotment
Jordan Resource Area:
0805: Saddle Butte allotment
0902: West Cow Creek Allotment
0904: Bogus Creek Allotment
Note: Boundaries not marked where designated rivers form boundaries.
SCALE:
0.5 inch = 1.0 mile
N
Access Points:
A Black Rocks Road
B Birch Creek Road (Primary Access Point)
C Hole-in-the-Ground
D Leslie Gulch Road (Primary Access Point)
BLM Road Numbers
6366
0
00
County Road Numbers
632
Named BLM Roads:
7302-0-00: Black Rocks Road
7305-0-00: Miller Lane (Mud Lake Road)
Named County Roads:
599: Rhinehart Ranch Road
632: Bogus Ranch Road
691: Tub Spring Road
780: Morcom Ranch Road (Hole-in-the-Ground Road)
790: Kiger Road
796: Blowout Reservoir Road (Cow Creek Road)
627: Turner Road
635: Birch Creek Road
703: Airstrip Road

MAP 3-A


R 41 E
Joins Map 3-A
R 42 E
R 43 E
T 31 S
T 32 S
T 33 S
Rome
1001
1101
95
522
A
6357
0
00
SOUTH
R 42 E

GRAZING ALLOTMENTS –
National Wild and Scenic Owyhee
And North Fork Owyhee Rivers

Wild & Scenic River Corridor Boundaries
Owyhee
North Fork Owyhee
Mineral Withdrawal Corridor
State Lands Adjacent to River Corridor
Private Lands Adjacent to River Corridor

BLM Grazing Allotment Boundary
(Note: Boundaries no! marked
#here formed by designated rivers.)
1001: Arock Allotment
1101: Jackies Butte Summer Allotment
1105: Rayburn Allotment
1108: Whitehorse Allotment

Primary Access Route
Other Routes

BLM Road Numbers 6366 0 00 County Road Numbers 632

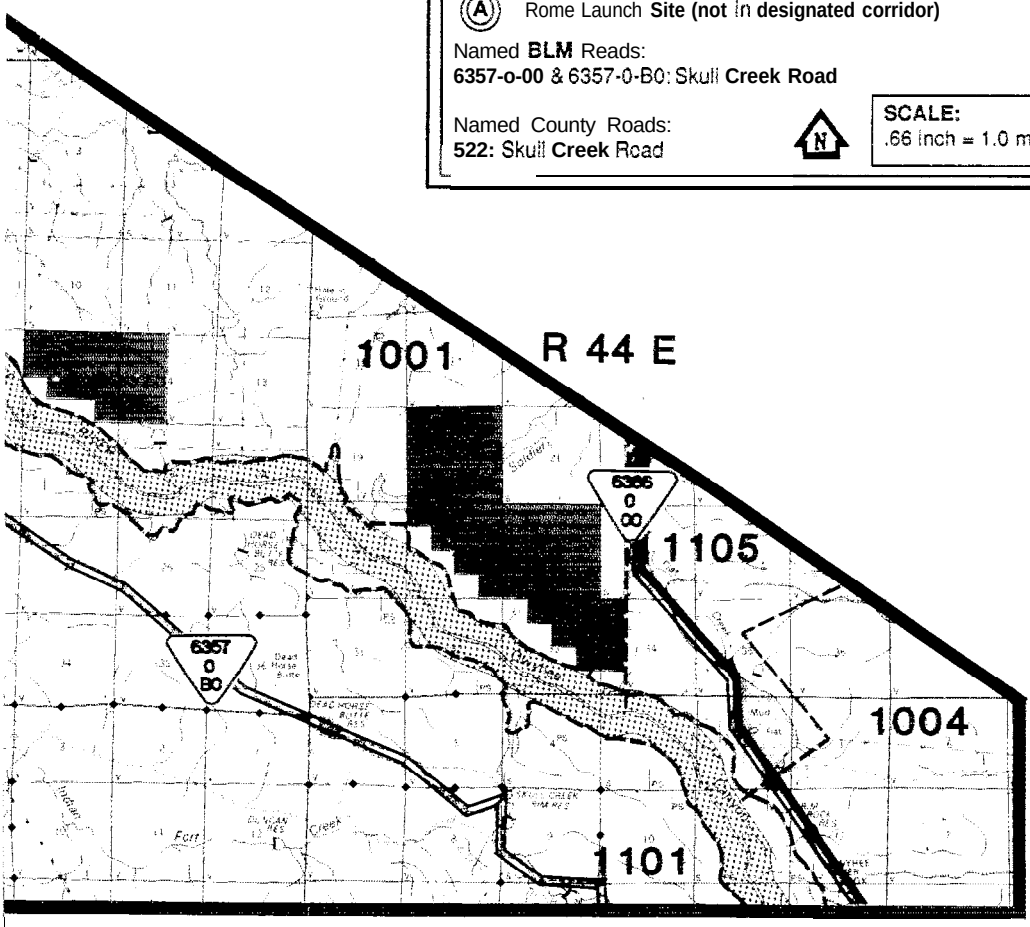
Access Points:
A Rome Launch Site (not in designated corridor)

Named BLM Reads:
6357-o-00 & 6357-0-B0: Skull Creek Road

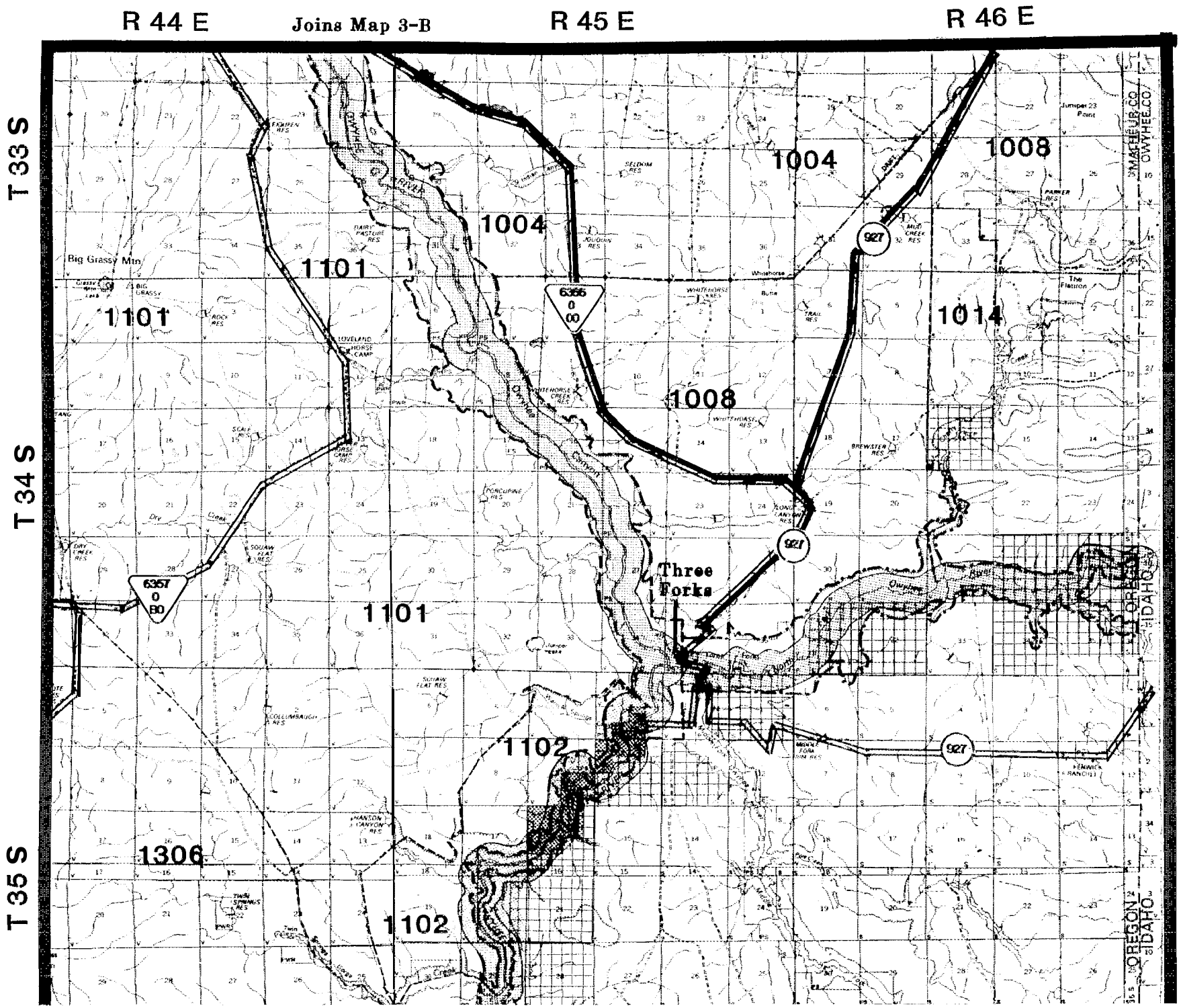
Named County Roads:
522: Skull Creek Road

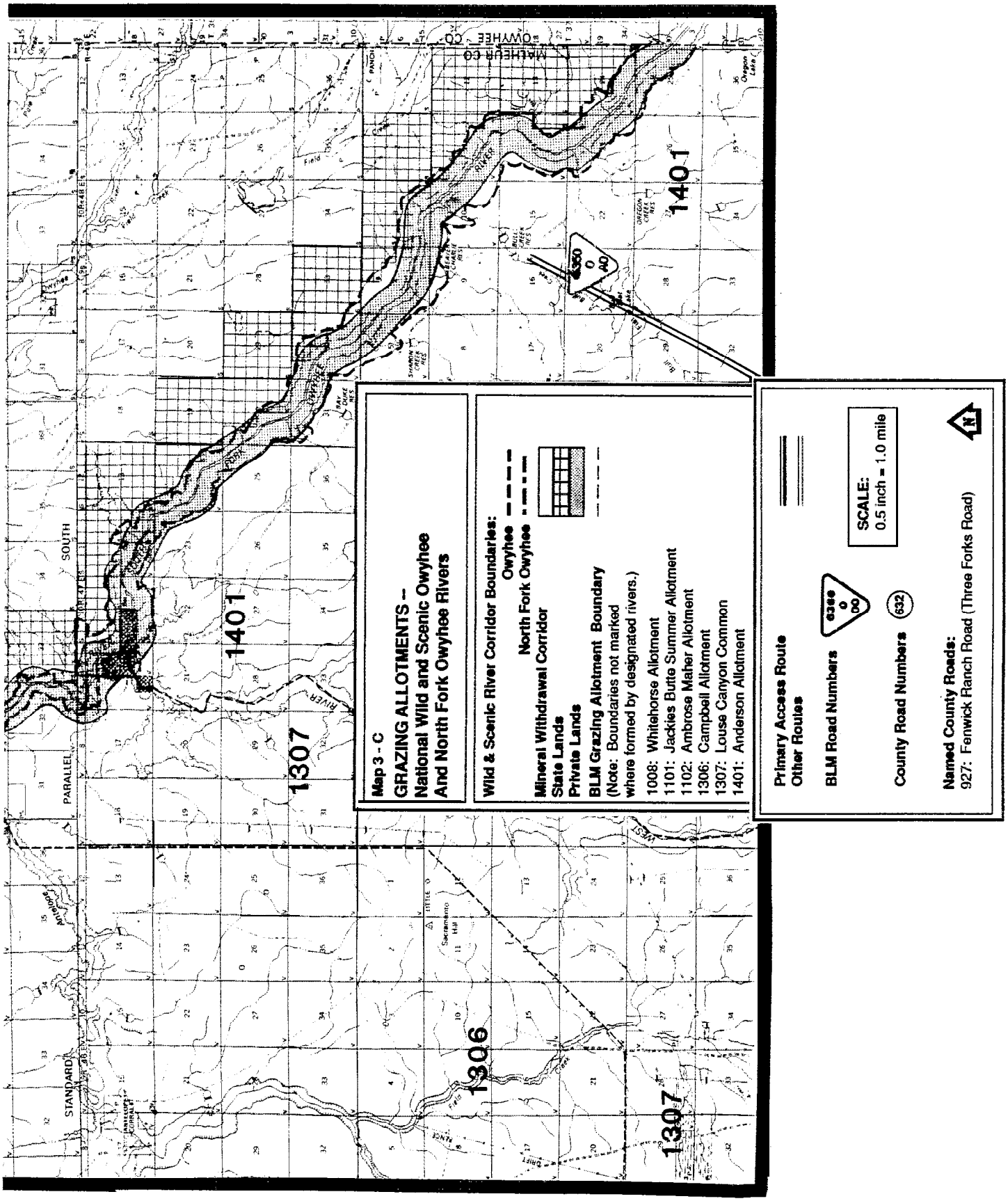
N

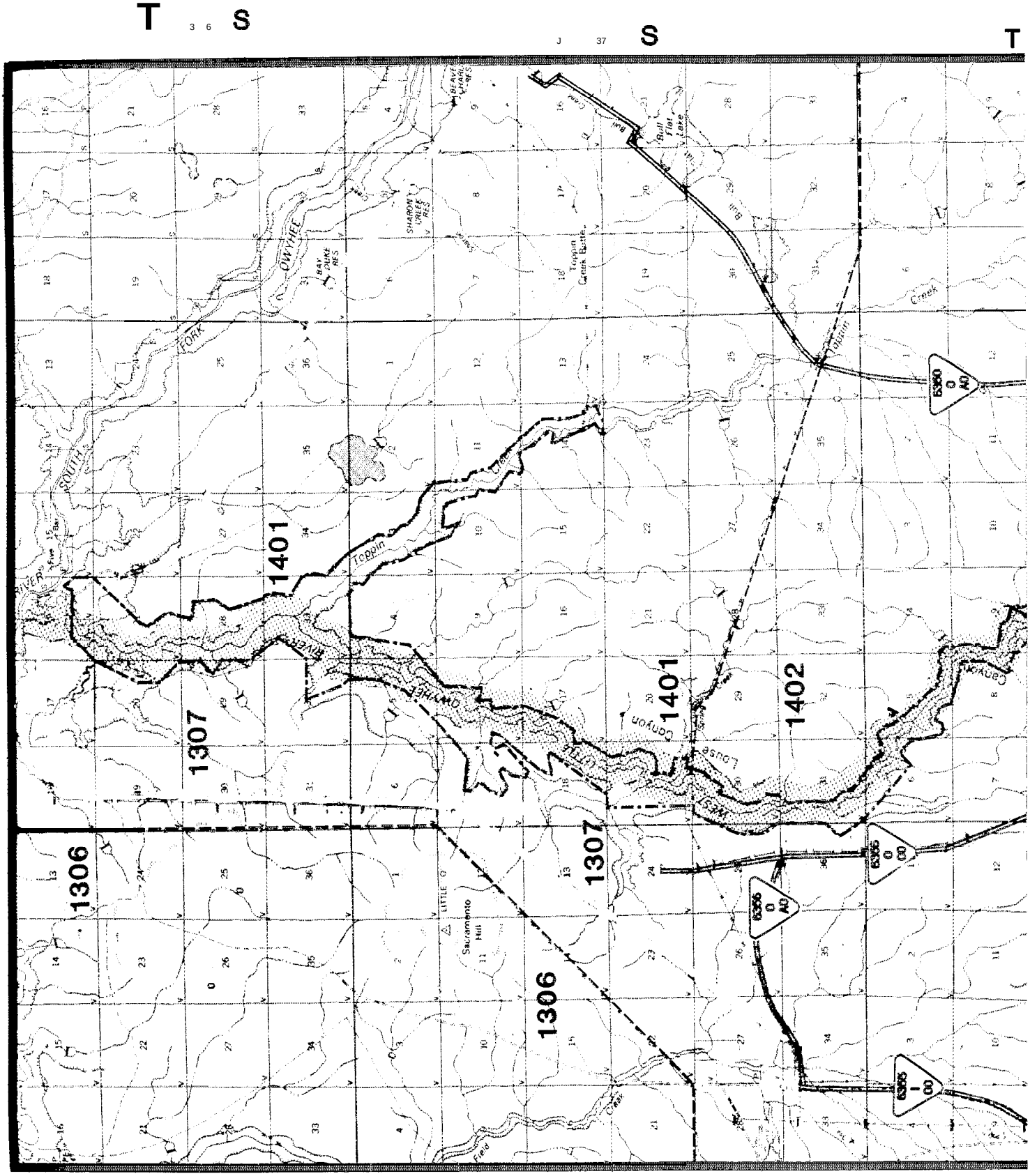
SCALE:
.66 inch = 1.0 mile

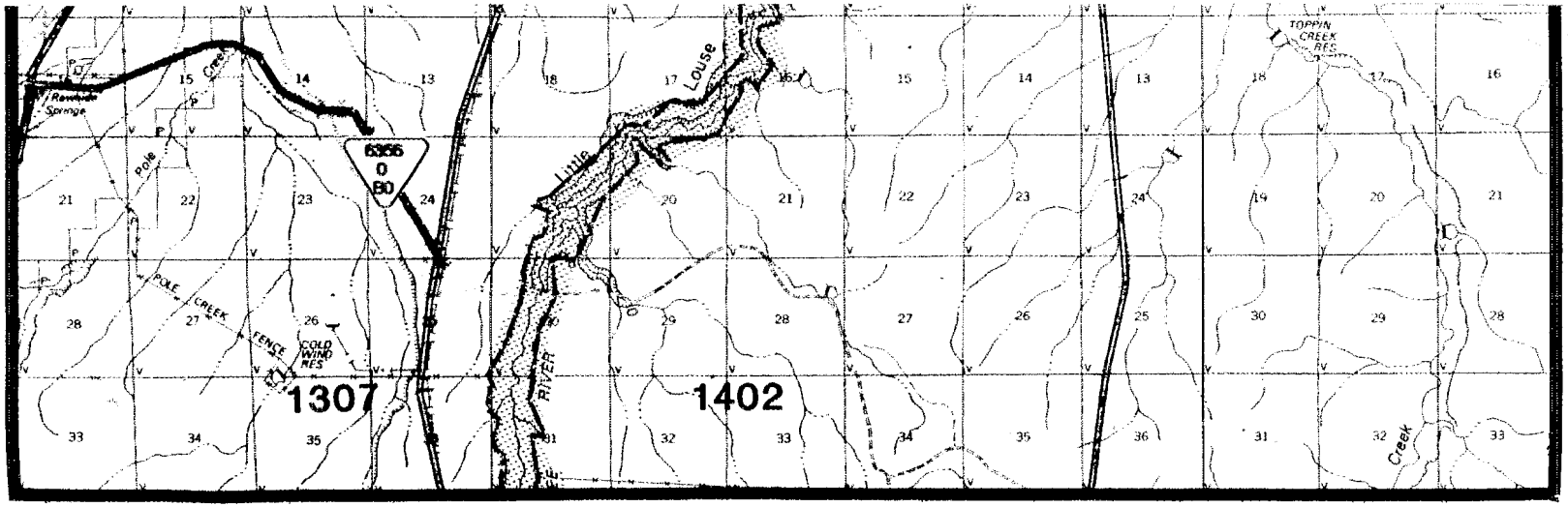


Joins Map 3-C


R 44 E
Joins Map 3-B
R 45 E
R 46 E
T 33 S
T 34 S
T 35 S
1004
1008
1004
1101
1101
1014
1008
1101
1102
1306
1102
Three Forks
6356
0
00
6357
0
B0
927
927
927
Big Grassy Mtn
OREGON
IDAHO
OREGON
IDAHO


Map 3 - C
GRAZING ALLOTMENTS --
National Wild and Scenic Owyhee
And North Fork Owyhee Rivers
Wild & Scenic River Corridor Boundaries:
Owyhee
North Fork Owyhee
Mineral Withdrawal Corridor
State Lands
Private Lands
BLM Grazing Allotment Boundary
(Note: Boundaries not marked
where formed by designated rivers.)
1008: Whitehorse Allotment
1101: Jackies Butte Summer Allotment
1102: Ambrose Maher Allotment
1306: Campbell Allotment
1307: Louse Canyon Common
1401: Anderson Allotment
Primary Access Route
Other Routes
BLM Road Numbers
County Road Numbers
SCALE:
0.5 inch = 1.0 mile
Named County Roads:
927: Fenwick Ranch Road (Three Forks Road)
N
1401
1307
1306
1307
T 37 S
T 36 S
STANDARD
PARALLEL
SOUTH
OWYHEE CO
MALHEUR CO


T 36 S
J 37 S
T
1306
1307
1401
1402
SOUTH FORK
OWYHEE
RIVER
Toppin
Canyon
Lower
Sacramento Hill
LITTLE
Field
Creek
Bull Flat Lake
Toppin Cattle Guard
SHARON'S CREEK RES
BEAVER CHARLIE RES
BAY LAKE RES
6360
0
AD
6366
0
AD
6366
0
AD
6366
1
AD



R 46 E

Joins Map 4-B

R 47 E

R 48 E

GRAZING ALLOTMENTS –
National Wild and Scenic
West Little Owyhee River

Wild and Scenic River Corridor Boundary
Mineral Withdrawal Corridor
BLM Grazing Allotment Boundary
(Note: Boundaries not marked where formed by designated rivers.)

1306: Campbell Allotment
1307: Louse Canyon Common
1401: Anderson Allotment
1402: Star Valley Common

Primary Access Route
Other Routes

BLM Road Numbers 6366 0 00 **County Road Numbers** 632

Named BLM Roads:
6350-0-A0: Sharon Creek Reservoir Road

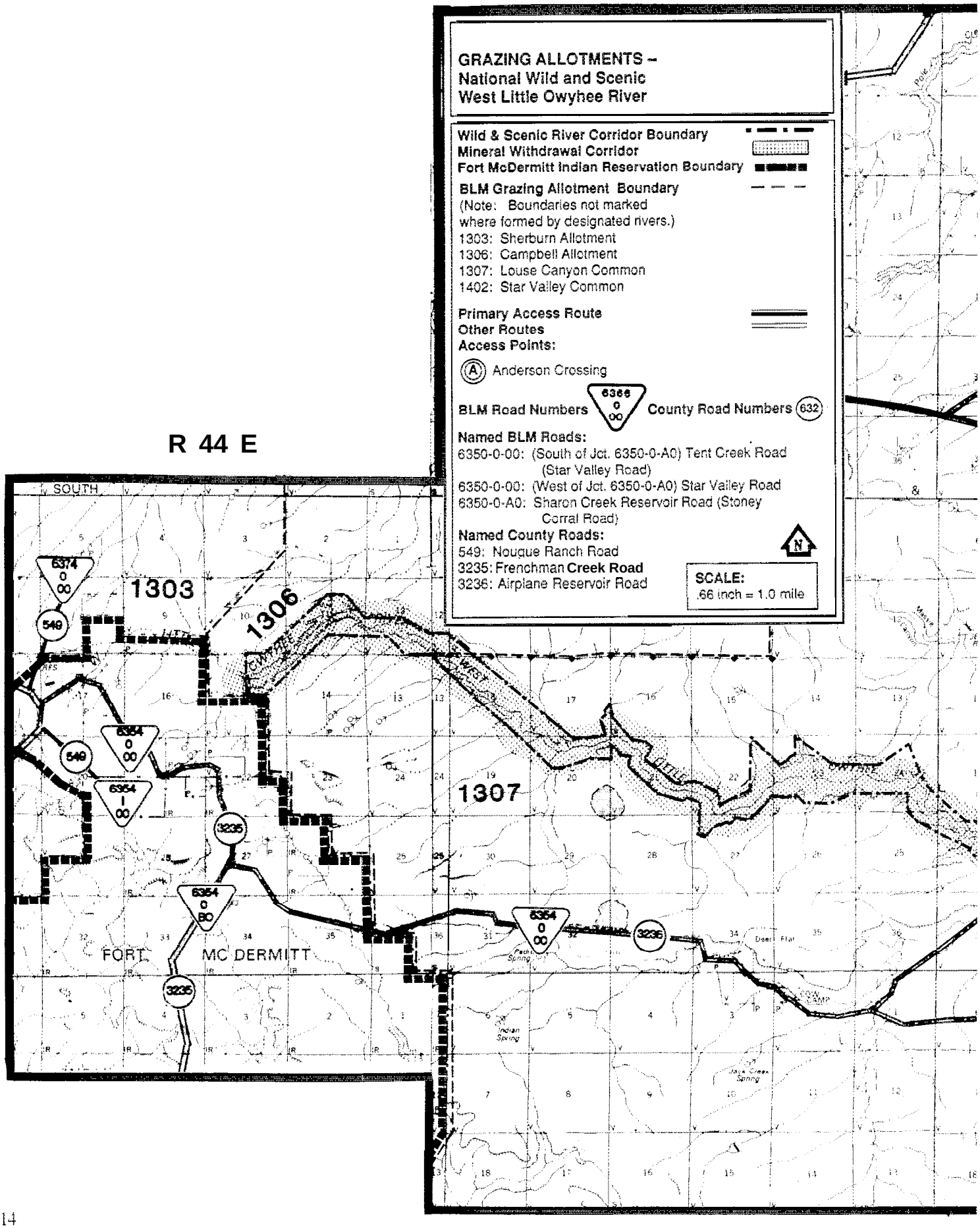
N

SCALE:
.66 inch = 1.0 mile

MAP 4-A

R 45 E

R 44 E

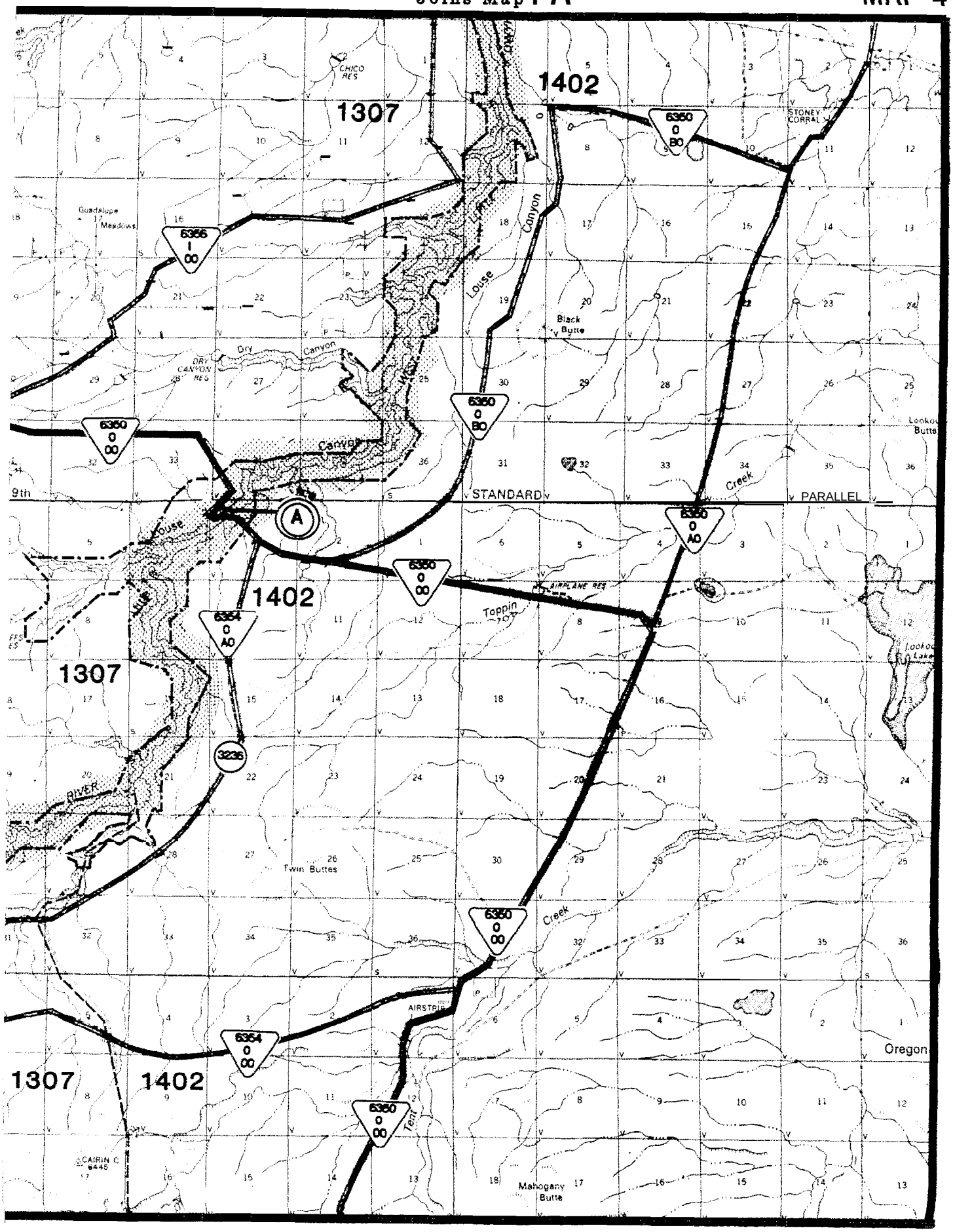

GRAZING ALLOTMENTS –
National Wild and Scenic
West Little Owyhee River
Wild & Scenic River Corridor Boundary
Mineral Withdrawal Corridor
Fort McDermitt Indian Reservation Boundary
BLM Grazing Allotment Boundary
(Note: Boundaries not marked where formed by designated rivers.)
1303: Sherburn Allotment
1306: Campbell Allotment
1307: Louse Canyon Common
1402: Star Valley Common
Primary Access Route
Other Routes
Access Points:
Anderson Crossing
BLM Road Numbers
County Road Numbers
Named BLM Roads:
6350-0-00: (South of Jct. 6350-0-A0) Tent Creek Road (Star Valley Road)
6350-0-00: (West of Jct. 6350-0-A0) Star Valley Road
6350-0-A0: Sharon Creek Reservoir Road (Stoney Corral Road)
Named County Roads:
549: Nouque Ranch Road
3235: Frenchman Creek Road
3236: Airplane Reservoir Road
SCALE:
.66 inch = 1.0 mile
SOUTH
1303
1306
1307
FORT MC DERMITT
549
3235
3236
6374
6354
Deer Flat
Indian Spring
Jack Creek Spring

R 46 E

Joins Map 4-A

R 47 E

MAP 4-B



T 39 S

T 40 S

T 41 S

☆ U.S. GOVERNMENT PRINTING OFFICE: 1993—790-132 / 81040 REGION NO.10

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VALE DISTRICT OFFICE
100 Oregon Street
Vale, Oregon 97918

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

FORWARDING AND ADDRESS
CORRECTION REQUESTED

FIRST CLASS MAIL
POSTAGE & FEES PAID
Bureau of Land Management
Permit No. G-76

Received 10/15/93