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National Wild River Management Plan

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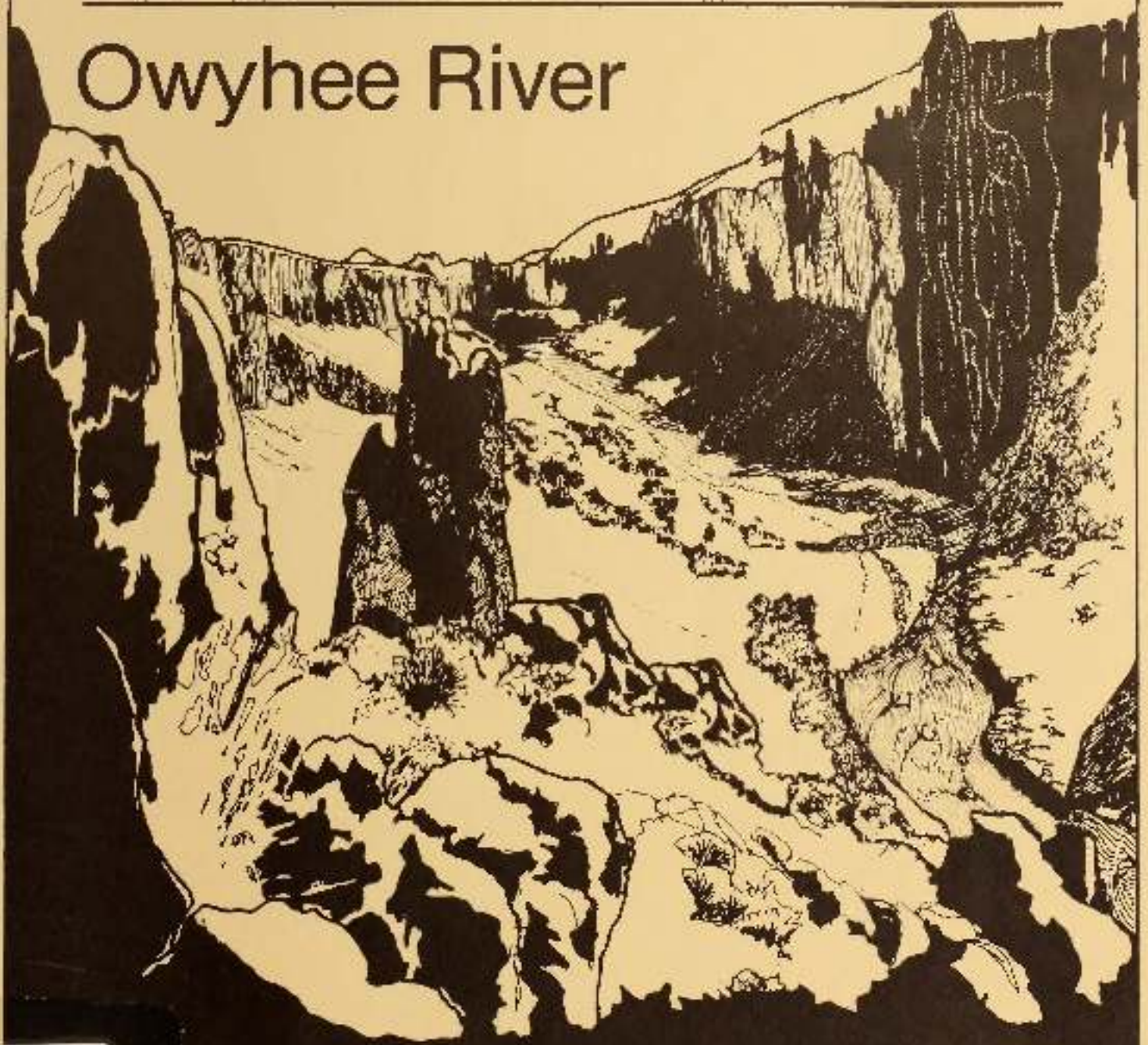
Owyhee River



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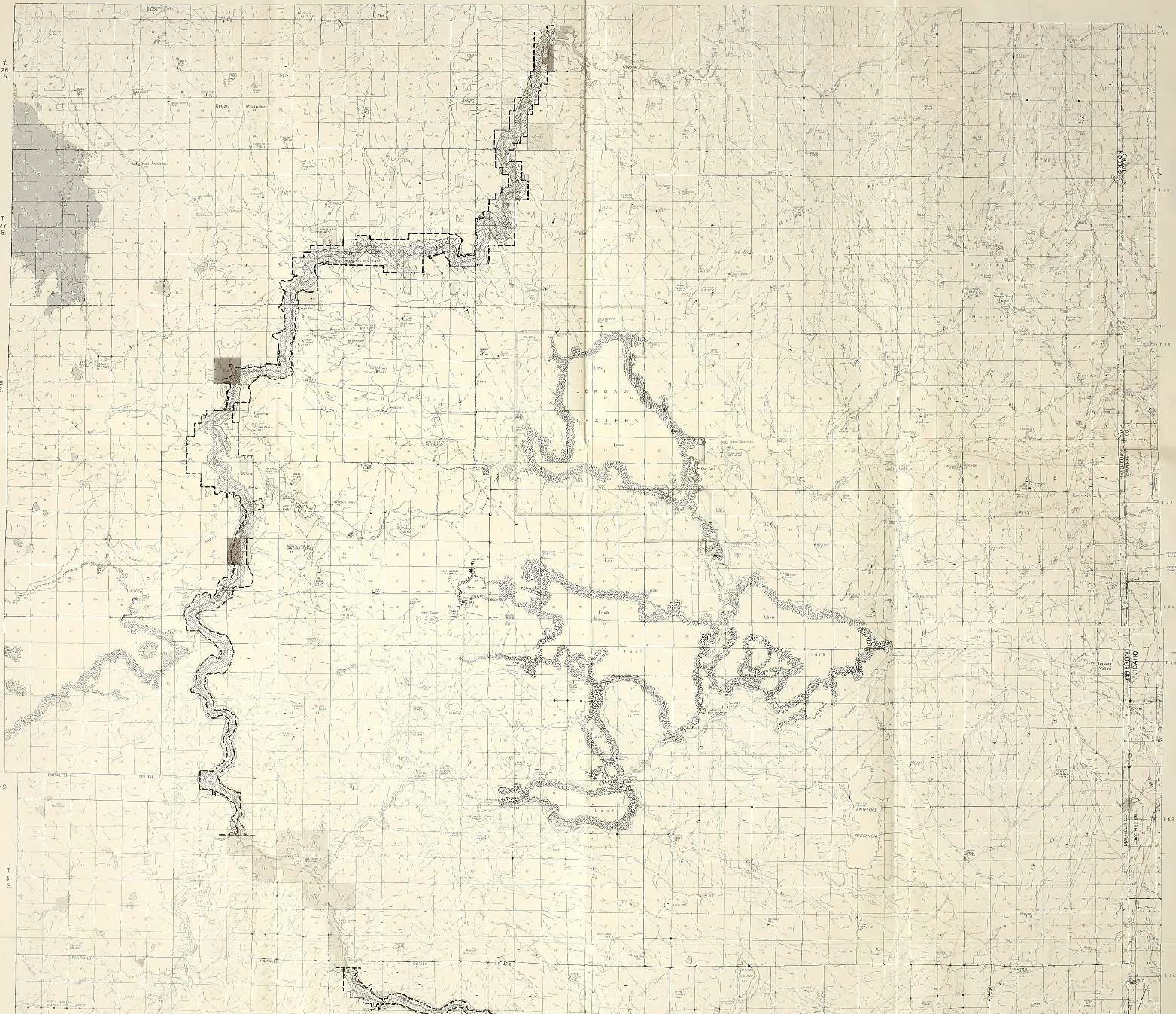
T. 26 S.
T. 27 S.
T. 28 S.
T. 29 S.
T. 30 S.
T. 30½ S.
T. 31 S.
Cedar Mountain
JORDAN
CRATERS
Lava
OREGON
IDAHO

LEGEND

---- Owyhee River Administrative Boundary

Land and Mineral Withdrawal Boundary

Bureau of Land Management Lands

State Lands

Private Lands

NOTE: Land status portrayed on land adjacent to Owyhee River only.

VICINITY MAP

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

NATIONAL WILD RIVER MANAGEMENT PLAN

OWYHEE RIVER
OREGON

1985

1 0 1 2 3 4 5 MILES
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Figure 6

ID 88647321

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
VALE DISTRICT OFFICE
P.O. Box 700 100 Oregon Street
Vale, Oregon 97918

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June 28, 1985

On October 19, 1984, President Reagan signed Public Law 98-494, designating 120 miles of the Owyhee River from the Oregon-Idaho boundary to the Owyhee Reservoir, excluding the Rome Valley from China Gulch to Crooked Creek, as a "Wild River" to be included in the National Wild and Scenic Rivers System. Within one year from the passage of the act, the Secretary of Interior (Bureau of Land Management) must submit a management plan for the designated river to Congress.

Please review this draft document by July 29, 1985 and submit any comments you may have to:

Bureau of Land Management
Vale District Office
Post Office Box 700
Vale, Oregon 97918

I appreciate the involvement of all those who have cooperated in the development of the plan to this stage and look forward to continued public participation in developing the final management plan for the Owyhee River.

Sincerely yours,

David Lodzinski

David Lodzinski, District Manager,
Vale District

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Prepared by: Gerald Meyer, Outdoor Recreation Planner
Edited by: Barry Rose, Public Affairs Specialist
Illustrated by: Mark Davis, Landscape Architect

National Wild River Management Plan
Owyhee River
Oregon

U.S. Department of the Interior
Bureau of Land Management
Vale District - Oregon

Recommended by: _____
Ray Monroe, Southern Malheur Resource Area Manager,
Vale District

Recommended by: _____
Conrad Bateman, Acting Northern Malheur Resource Area Manager
Vale District

Recommended by: _____
District Manager,
Vale District

Approved by: _____
William C. Leavell, State Director, Oregon

Table of Contents

Part I - Introduction

Background

Recent Legislation

In 1970 the state of Oregon designated the Owyhee River as a State Scenic Waterway from the Oregon - Idaho boundary to Three Forks and from Crooked Creek to the Owyhee Reservoir.

In 1979 the U.S. National Park Service completed the Owyhee Wild and Scenic River Study Final Report - Environmental Statement pursuant to the National Wild and Scenic Rivers Act. The study recommended that a 192-mile segment of the Owyhee River extending from the Duck Valley Indian Reservation in Idaho to the Owyhee Reservoir in Oregon be added to the National Wild and Scenic Rivers System, under administration of the Bureau of Land Management and the State of Oregon.

On October 19, 1984, President Reagan signed Public Law 98-494, designating 120 miles of the Owyhee River from the Oregon-Idaho boundary to the Owyhee Reservoir, excluding the Rome Valley from China Gulch to Crooked Creek, as a "Wild River" to be included in the National Wild and Scenic Rivers System.

Historical Perspective

Native Americans may have inhabited the Owyhee Uplands as early as 12,000 years ago, but recorded history of this region began in 1812 with the first explorations by white men. The name Owyhee evolved out of a scouting expedition led by Donald McKenzie in 1819. Two Hawaiian Islanders accompanying the party disappeared in the Owyhee River vicinity and by the 1830's the river had become known as the "Owyhee" (colloquial useage of the word "Hawaii").

In 1863 prospectors discovered gold along Jordan Creek, and the mining towns of DeLamar, Dewey, Ruby City, Silver City and Baxterville were developed in the vicinity of the Owyhee River. By the 1880's cattle and sheep ranchers had become established on the plateaus and canyons of the Owyhee.

The first known recreation use of the river occurred in 1951, when commercial outfitter Prince Helfrich

floated from Three Forks to Rome utilizing surplus World War II rubber assault rafts. Boating use remained extremely light through the 1950's and 1960's. The Bureau of Land Management (BLM) began recording recreation use in 1974, when 482 persons floated the river. By 1980, 2,000 boaters were utilizing the Owyhee and popular campsites were beginning to show the effect of recreational use.

Purpose and Scope

This National Wild River Management Plan establishes a comprehensive set of actions to provide the Owyhee River a level of resource protection, management and public use consistent with the Wild and Scenic Rivers Act and interim guidelines for managing wilderness study areas. This plan also sets forth a sequence for implementing the identified management actions.

This plan covers the 120 mile segment of the main stem Owyhee River from the Oregon-Idaho boundary to the Owyhee Reservoir. The river segment from China Gulch to Crooked Creek (14 miles) was excluded from wild river designation.

Relationship to Land Use Planning

The Owyhee River is identified as a special recreation management area in the Bureau of Land Management Vale District's Northern and Southern Malheur Management Framework Plans, Oregon State Scenic Waterway planning, Oregon State Comprehensive Outdoor Recreation Plan (SCORP), and Malheur County Land Use Plan. Its designation and management as a wild river is consistent with the objectives of each planning document.

Within the wild river corridor, four wilderness study areas (WSAs) have been identified under the requirements of the Federal Land Policy and Management Act of 1976, Section 603. The BLM Interim Management Policy and Guidelines for Lands Under Wilderness Review (December, 1979) provide the basis for allowable management activities within WSAs.

Setting and Multiple Resource Values

Location

The 120 miles of the main stem of the Owyhee River included in this plan are located in Malheur County in southeast Oregon. The river flows northerly from the Oregon-Idaho boundary to Three Forks (26 miles), Three Forks to China Gulch (39 miles) and Crooked Creek to the Owyhee Reservoir (55 miles).

Access

1. The Upper Section: Main Stem from Oregon-Idaho Boundary to Three Forks (26 miles, refer to Fig. 1, 2 and 3)

Access to the 26 miles of the main stem designated by the Wild and Scenic Rivers Act is located within Idaho and Nevada. Access for the main stem is located 12 miles within the Duck Valley Indian Reservation and at Garat Crossing where the El Paso Natural Gas pipeline crosses the river. Boaters may also access the designated portion of the main stem from the South Fork Owyhee River. There are three main access points to the South Fork. These are: 1) at the El Paso Natural Gas Pipeline crossing in Nevada, 2) at the YP Ranch in Nevada, and 3) at the 45 Ranch in Idaho. Access to the pipeline crossings on the main stem and South Fork requires the use of four-wheel drive vehicles within the canyons. The put-in points at the 45 Ranch, YP Ranch and Duck Valley Indian Reservation can be reached with a high clearance, two-wheel drive vehicle with the approval of the property owners or officials of the reservation. All principal access routes may be unusable during periods in the spring due to muddy road conditions.

2. Middle Section: Main Stem from Three Forks to Rome (39 miles, Refer to Fig. 4)

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. There is no road access to the river from Three Forks to the U.S. 95 crossing at Rome. The BLM has developed a scenic overlook 15 miles downstream from Three Forks along the Owyhee Canyon's east rim.

3. Lower Section: Main Stem from Rome to Leslie Gulch (55 miles, refer to Fig. 5)

A short graveled spur leads to a developed river access just south of the U.S. 95 bridge crossing at Rome. Parking, camping and sanitation facilities are available. Four dirt roads below Rome provide secondary vehicle access to the river. Each of the roads (Bogus Creek, Hole-in-the- Ground, Birch

Creek and Black Rocks) requires the use of high clearance vehicles. The Bogus Creek and Black Rocks Roads also require the use of four wheel drive. All of these roads traverse private land and rancher permission is required for access.

The final takeout is at Leslie Gulch on the Owyhee Reservoir. Twelve (12) miles of slackwater must be crossed to reach Leslie Gulch. Recreation facilities at Leslie Gulch include a boat ramp, restrooms, parking area, camping area, fish cleaning facilities and trash receptacles.

4. Foot Access

There are no regularly maintained foot trails into the canyon. However, the river can be reached by way of draws and breaks in the rim, especially along the main stem above Three Forks. Many miles of the canyon are inaccessible from the rim because of the near vertical cliffs. This is particularly true in the section from Three Forks to China Gulch near Rome. Although there are no foot trails along the canyon bottom, most of the distance can be hiked during low water using game trails and by wading the stream bed.

Area Size and Ownership

Owyhee River from Oregon-Idaho Boundary to Owyhee Reservoir

The land area within one-quarter mile of the mean high water line on each side of the river totals 38,400 acres. Eight percent (3,010 acres) is privately owned, 88 percent (33,720 acres) is in federal ownership and 4 percent (1,670 acres) is owned by the State of Oregon.

Physiography

The Owyhee River cuts a canyon 500 to 1,000 feet deep into the high plateau of the Owyhee Uplands that cover southeast Oregon. The plateau of the Owyhee Uplands 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.

Landscape Character

The canyons of the Owyhee River are dramatic landforms. The reddish-brown canyon walls reach up to 1,000 feet above the pristine sagebrush and grass covered talus slopes that form the river's edge. In places, the cliffs drop 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.

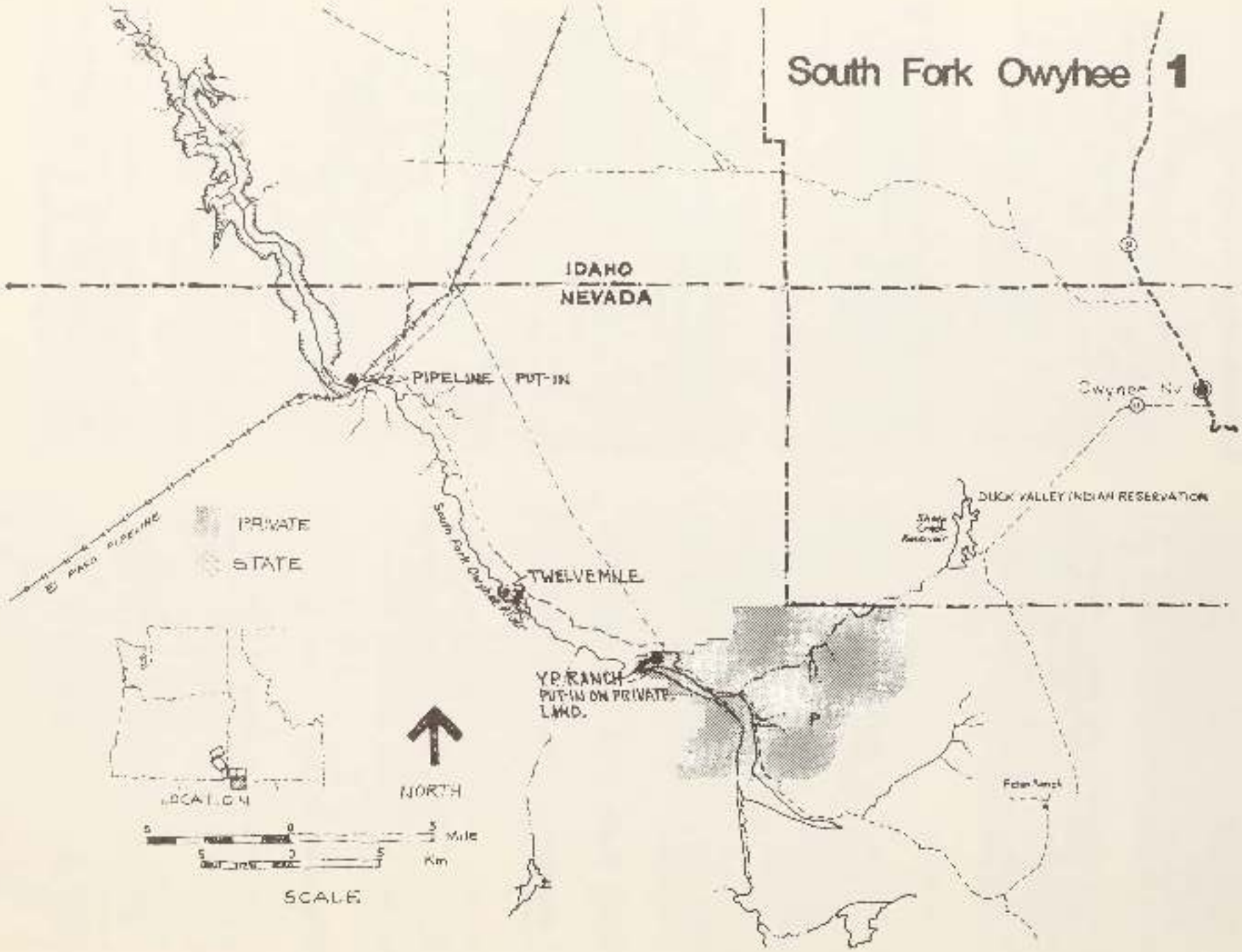
Vegetation

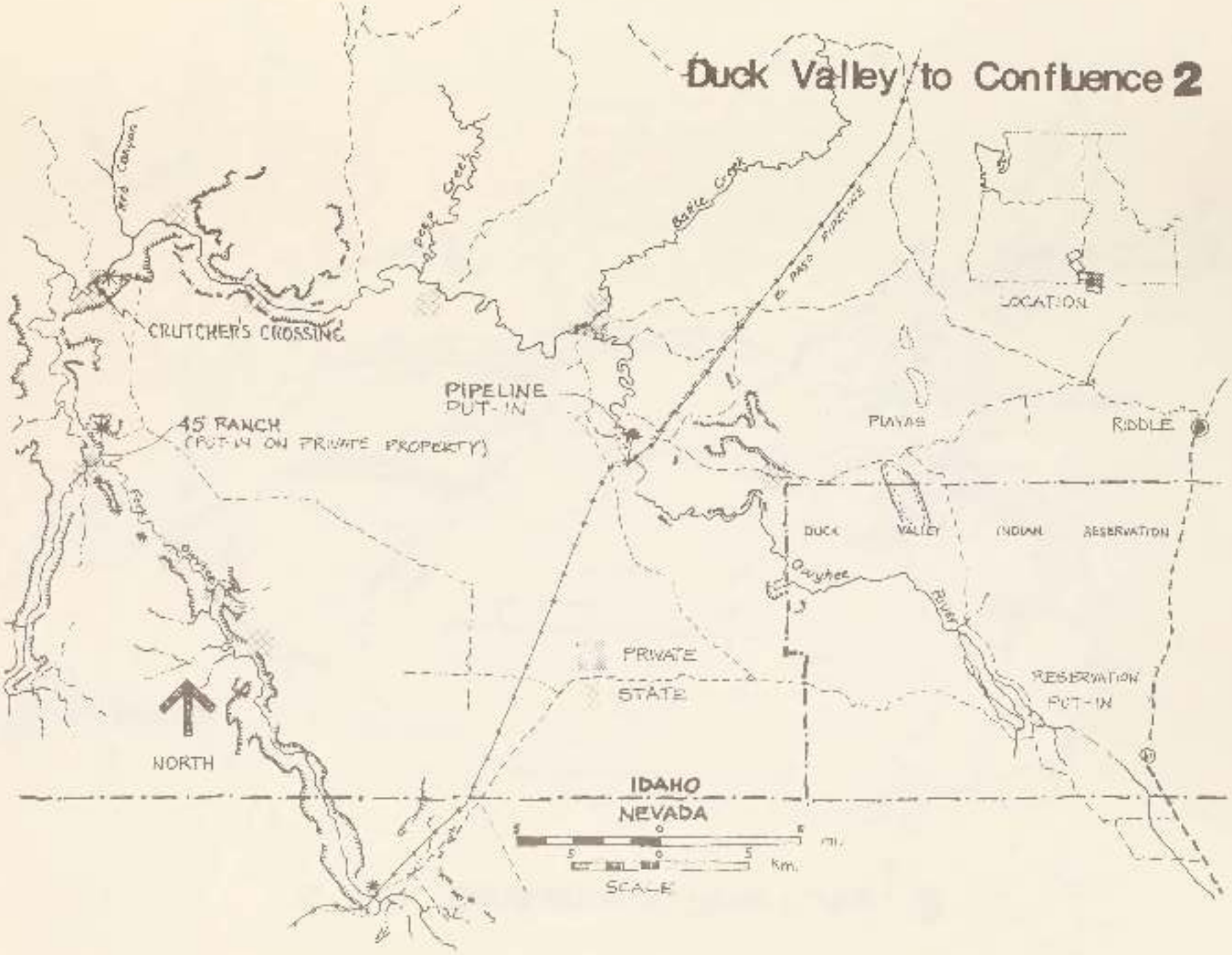
The Owyhee River Canyon lies within the broader landform/vegetation classification known as the Intermountain Sagebrush Province/Sagebrush Steppe Ecosystem (Bailey-Kuchler, 1966). The canyonlands are comprised of 70 percent rock outcrop, 10 percent rock rubble (talus), and 20 percent river bottoms and riparian areas. The most dominant plant species on the landscape is big sagebrush. Basin big sagebrush is commonly found on the canyon bottoms adjacent to the river channel, while Wyoming big sagebrush occupies the dryer slopes of the canyons. Pure stands of Idaho fescue and bluebunch wheatgrass often occupy the canyons' steep slopes, with Idaho fescue being more abundant in sheltered, more moist habitats.

The riparian areas of the canyons are generally very narrow and comprised mostly of grasses, rushes and sedges. Only in isolated areas of the main canyons and tributary canyons are species of juniper, willow, and hackberry found.

Three plant species known to be located in the Owyhee Canyonlands are classified as endangered, threatened or sensitive. These species are:

1. Owyhee River Stickseed (Hackelia ophiobia) - On Oregon's Endangered list and proposed for the Federal Endangered list. First discovered in Idaho on the East Fork in 1981. Grows only in shaded moist areas on the Owyhee River.


South Fork Owyhee 1
IDAHO
NEVADA
PIPELINE PUT-IN
Owyhee Nv
DUCK VALLEY INDIAN RESERVATION
El Paso Pipeline
PRIVATE
STATE
South Fork Owyhee
TWELVEMILE
Y.P. RANCH
PUT-IN ON PRIVATE LAND.
LOCATION
NORTH
Mile
Km
SCALE


Duck Valley to Confluence 2
LOCATION
CRUTCHER'S CROSSING
PIPELINE
PUT-IN
45 RANCH
(PUT-IN ON PRIVATE PROPERTY)
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RIDDLE
DUCK
VALLEY
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RESERVATION
Owyhee
RIVER
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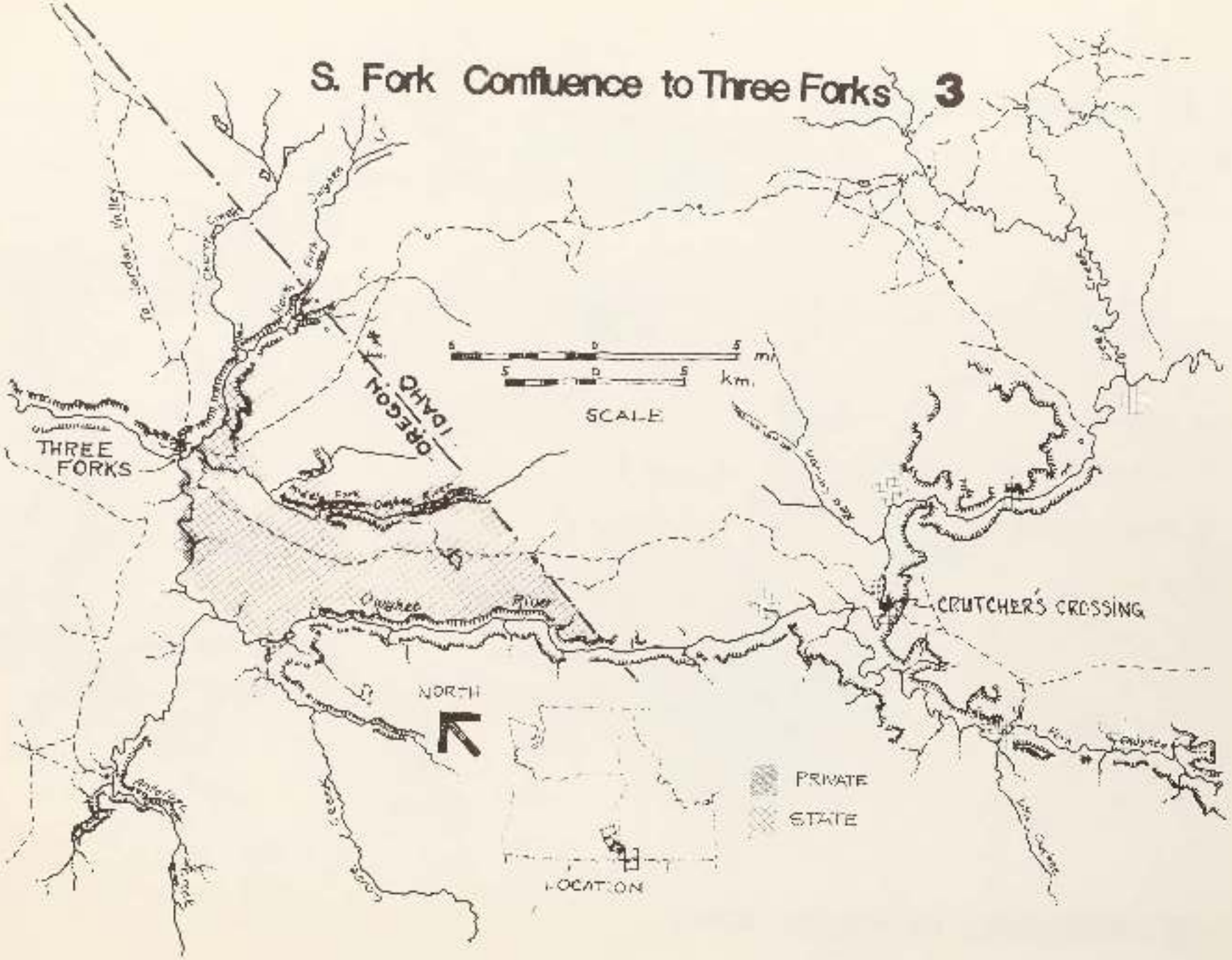
S. Fork Confluence to Three Forks 3
THREE FORKS
OREGON
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Owyhee River
NORTH
PRIVATE
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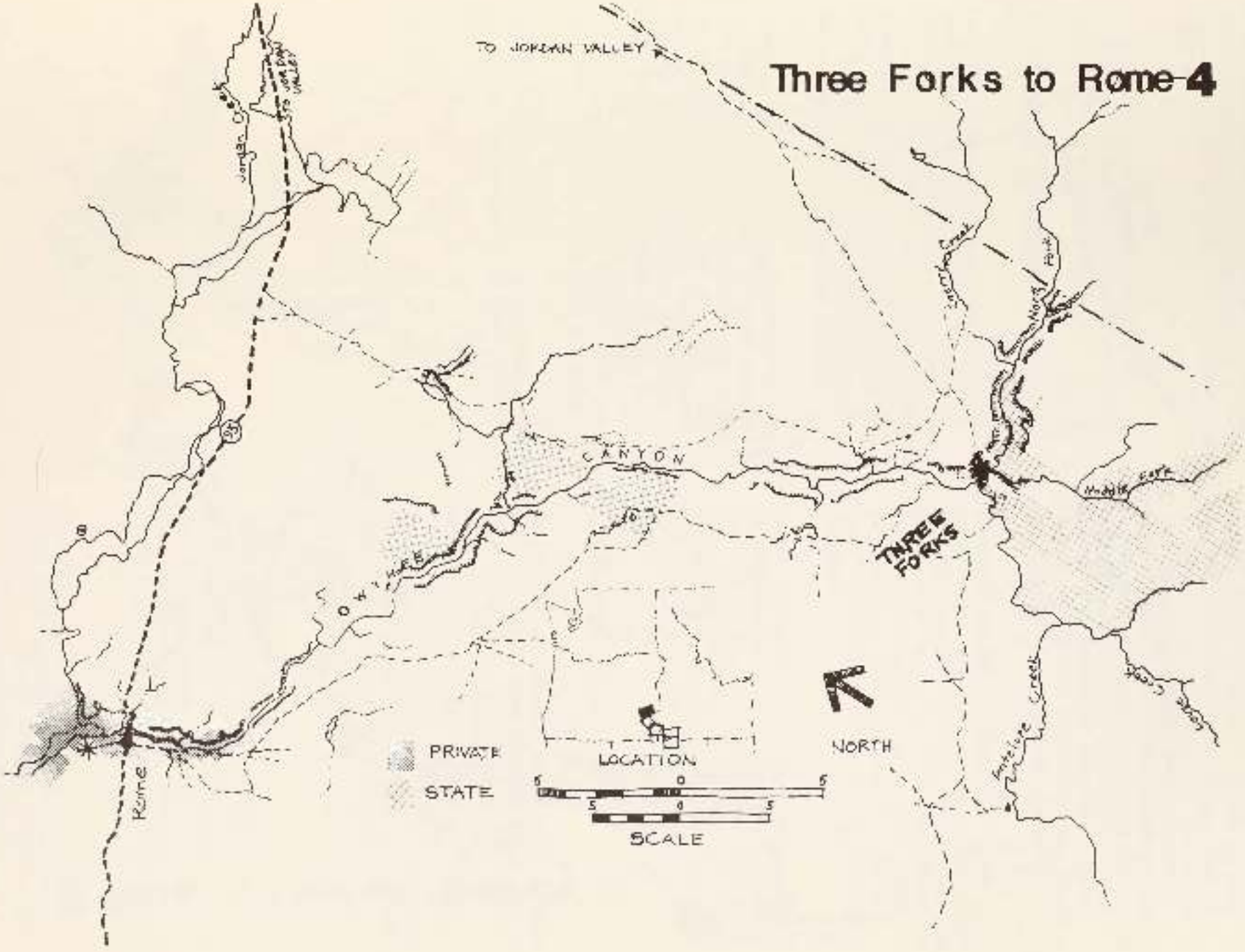
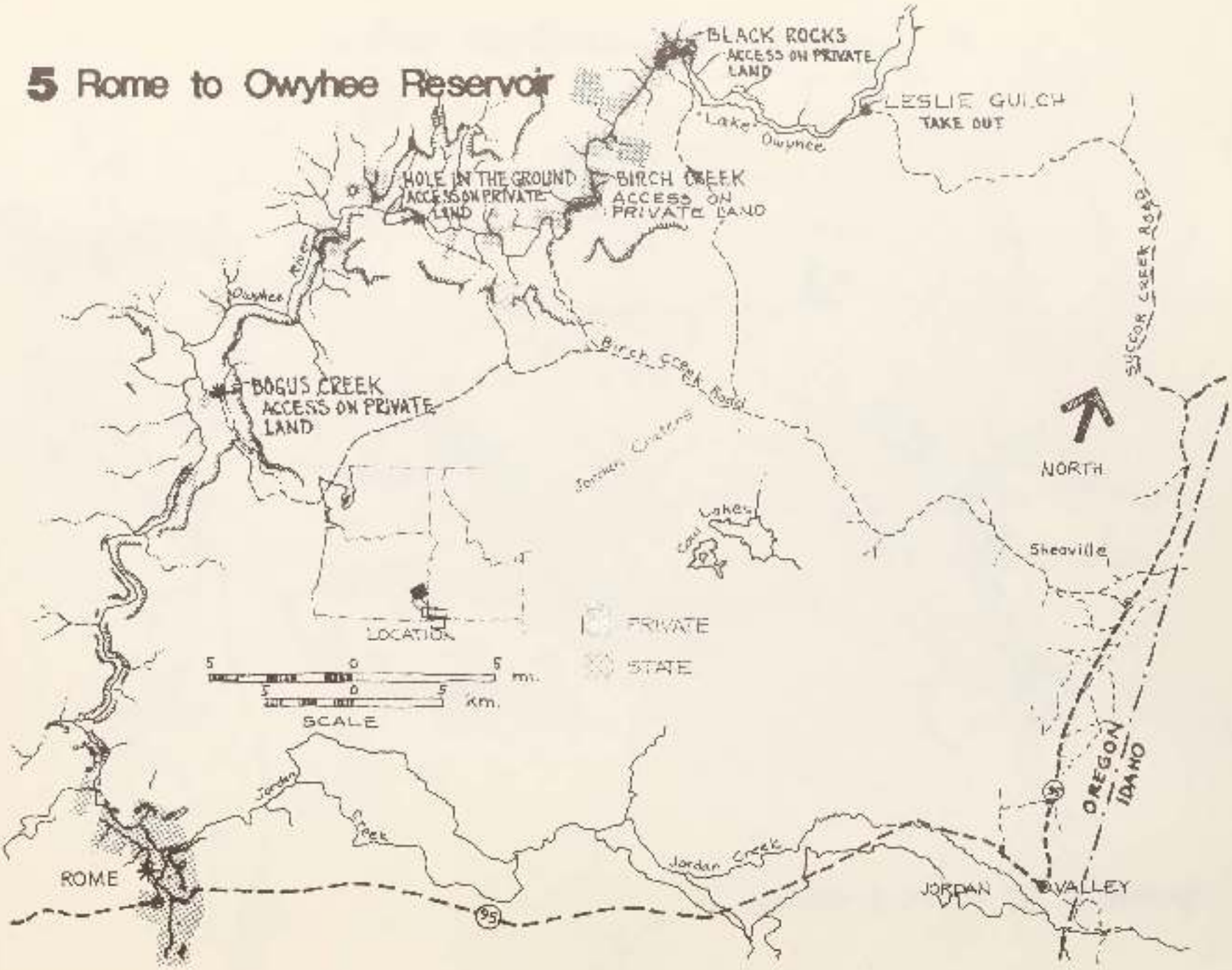
LOCATION


Three Forks to Rome-4
TO JORDAN VALLEY
CANYON
THREE FORKS
Rome
PRIVATE
STATE
LOCATION
NORTH
SCALE

5 Rome to Owyhee Reservoir



2. Andersun's Buttercup (Ranunculus andersonii) - On the Oregon list of threatened species, and is located in the Owyhee Canyon near outcrops of the upper rim.

3. Inch-High Lupine (Lupinus uncialis) - On Oregon's Watch List, and is found only along the talus slopes of the Owyhee River.

Fish and Wildlife

The Owyhee River complex provides excellent habitat for many species of wildlife. The primary species are mule deer, bobcat, mountain lion, pronghorn antelope, bighorn sheep, chukar, Canada geese and other waterfowl, beaver, river otter and raptors (mostly Golden eagles). Only bighorn sheep, Canada geese and other waterfowl are significantly affected by recreational use of the canyons.

Thirty-five California bighorn sheep were reintroduced into the Owyhee Canyon during the winter of 1983. Twenty-one bighorn sheep were released in the rimrock breaks on the west side of the river near Iron Point. The remaining fourteen bighorns were released below Three Forks. The Oregon Department of Fish and Wildlife has plans to release additional bighorn sheep in the canyon complex above Three Forks. Bighorn sheep are also moving into Oregon from the Idaho population.

The Owyhee River is also a rich reproductive area for waterfowl, especially Canada geese. Nesting pairs of geese have been reported at 1 mile intervals along the river shoreline. Geese and other waterfowl are in their nesting, brood rearing and moulting periods during the same time the river is used for recreational boating. Observations of geese and ducks during these periods show that nesting pairs and broods are severely disturbed by river use. Boating parties tend to force broods downstream, scattering or displacing immature waterfowl along miles of shoreline, often despite attempts by floaters to avoid close contact.

Squawfish, chiselmouth, shiners, dace, and bridgelip and coarsescale suckers are native to the river. The native redband trout may also exist. The Oregon State Department of Fish and Wildlife has successfully introduced channel catfish, smallmouth bass, and other spiny rayed fish. Efforts to introduce rainbow trout have been only marginally successful.

Prior to the development of the Owyhee Dam, chinook and coho salmon, steelhead trout, and other anadromous fish migrated from the Pacific Ocean upstream through the Columbia-Snake Systems into the Owyhee River. The construction of The Owyhee and other dams downstream on the Snake River blocked these migrations.

Cultural Resources

The Owyhee River Canyon and surrounding plateau are rich in historic homesteads and prehistoric sites. Most of the historic resources lie on private property. Historic sites typically consist of one or more stone buildings with partially collapsed roofs supported by juniper logs, or of log cabins constructed of well weathered junipers carved with names and dates of visitors and settlers. Other features include waterwheels, old wagons, wooden water pipes, rock and juniper-brush corrals, old wood stoves, and numerous tin cans and miscellaneous metal pieces.

Many petroglyphs are found within the canyon below Three Forks, and archaeological sites are numerous along the rims of the canyons. Prehistoric sites are also found in caves or beneath rock structures located above high water lines. Evidence of prehistoric use at these sites is limited chiefly to stone tools and the chips produced in tool making.

An archaeological survey of the main stem from Rome to the reservoir located 102 sites, which indicated that the river area was intensively utilized by Native Americans. Other limited work has been done on the river between the Oregon-Idaho

dary and Rome. This work showed that Native Americans were also using the upper stretch of the river, but not as intensively as the stretch below Rome.

In the summer of 1973, Dirty Shame Rockshelter, which is located on a tributary of the Owyhee River, was excavated by a crew from the University of Oregon. They concluded that it was occupied between 9500 and 400 years ago. Basketry, sandals, and projectile point types indicated that its cultural affinities were with the Northern Great Basin.

River patrols have noted that some petroglyphs and nearly one half of the known prehistoric sites have been defaced, illegally dug, or pot-hunted for artifacts. Many of the historic sites have suffered the theft of smaller artifacts such as cans, bottles, leather items, and miscellaneous tools. Larger items such as wagon parts have also disappeared.

There are no known paleontological sites within the river corridor.

Recreation

The Owyhee river system offers outstanding primitive recreation opportunities that provide a very high degree of solitude and physical challenge. The principal recreation activities are river boating, fishing and hunting. Recently there has been an increased interest in backpacking, particularly in the major tributary canyons of the main stem.

The river system offers whitewater opportunities with a difficulty of Class I through Class V (international scale) from February through June. There are several recommended portages during medium to high water levels on the middle and upper river segments. The remoteness of the area coupled with a number of rapids and rock falls in the river requires visitors to be experienced and properly equipped.

Other activities associated with river running include photography, wildlife viewing, general sightseeing, hiking, fishing, hunting, and horseback riding.

Wilderness Study Areas

The Owyhee River Canyonlands are the predominate landforms for four wilderness study areas (WSAs), totalling approximately 278,000 acres. Each WSA was found to be natural in character and to provide outstanding opportunities for solitude and primitive recreation, due in large part to the wilderness quality of the canyonlands.

The WSAs are being studied to determine if they are suitable for wilderness designation. The Vale District's Southern and Northern Malheur Management Framework Plans have identified portions of the four WSAs within Oregon as suitable for wilderness designation. Final wilderness recommendations will be submitted to the Secretary of the Interior for eventual congressional action. Until the wilderness review process has been completed, these areas must be managed to not impair their suitability for preservation as wilderness, subject to certain exceptions and conditions. The management of the WSAs is discussed in detail in the BLM Interim Management Policy and Guidelines for Lands Under Wilderness Review (December, 1979).

Water Rights

Many individuals or entities in Nevada, Idaho, and Oregon own and claim rights to the waters of the Owyhee main stem, mostly for agricultural purposes. In Oregon, these rights have been adjudicated. Water rights in Nevada and Idaho have not yet been adjudicated.

The largest upstream water withdrawals occur in the Duck Valley Indian Reservation where 12,000 acres are irrigated from the river. The water is collected in Wild Horse Reservoir, located 20 miles south of the reservation in Nevada, and then released into the river where a portion of the flow is diverted for irrigation.

Within the reservation, two smaller reservoirs (Sheep creek and Mountain View) have been developed by the Indians for recreation purposes, chiefly trout fishing and camping. Other withdrawals occur on the South Fork in Nevada, and at the 45 Ranch in Idaho.

The adjudicated or claimed water rights to the main stem and South Fork exceed average flow. If all rights were simultaneously exercised the effect would be to virtually dewater the river. 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. However, full utilization of water rights has yet to occur.

Range (Livestock)

The Owyhee River serves as boundary between a number of cattle allotments operating on the surrounding plateaus. Cattle enter certain portions of the canyon each year for water and to graze the abundant grasses found along the river and on reachable canyon slopes.

The seasonal concentrations by authorized livestock has caused a decline in vegetative condition along certain portions of the river. However, this problem is limited to areas where livestock access exists, and vegetation in most of the canyon is generally in excellent or pristine condition. In addition to their effects upon vegetation, some dead cattle can be found along the shoreline or among rocks in the river.

Minerals

The mineral resources of the Owyhee Canyon were evaluated from available geologic data supplemented by a limited amount of geochemical stream sediment and rock chip sampling by the Oregon Department of Geology and Mineral Industries (DOGAMI) under BLM contract. This geochemical survey became the primary basis for the metallic minerals classification of this evaluation. The DOGAMI report is entitled 'Geology and Mineral Resources of 16 BLM Counties, Oregon'. Using the DOGAMI report and a heavy mineral analysis conducted by Barringer Resources, Inc., the study area was reevaluated by BLM personnel.

The river corridor is moderately favorable for bentonite, zeolites, fluorite, gold, silver and mercury. Very little geologic study of a detailed nature has been done within the area. It is basically a broad north-plunging basin filled with upper Miocene to recent lacustrine (lake) and fluvially (river) deposited sediments with interbedded and mesa-capping lava flows. In this part of the basin, known as Rome Basin, the rocks are somewhat younger, and the "Rome Beds" of middle Pliocene age are prominent. Only a few northwest and north-trending normal faults of minor significance are present.

Energy and Utilities

Oil and gas leasing applications have been received for much of the canyonlands and surrounding plateaus within Oregon. Leases are being issued with stipulations prohibiting surface occupancy and disturbance within the canyonlands.

Table 1 Visitor Use Summary 1984

Three Forks – Rome

	No. of Users	No. of Launches	Ave. Group Size	User Days	Average User Length of Stay
Commercial	62	6	10.3	203	3.3 days
Noncommercial	85	21	4.0	244	2.9 days
Total	147	27	5.4	447	2.9 days

Rome – Leslie Gulch

	No. of Users	No. of Launches	Ave. Group Size	User Days	Average User Length of Stay
Commercial	461	42	11.0	2256	4.9 days
Noncommercial	1079	165	6.5	4576	4.2 days
Total	1536	207	7.4	6830	4.4 days

Total River

	No. of Users	No. of Launches	Ave. Group Size	User Days	Average User Length of Stay
Commercial	523	48	10.9	2459	4.7 days
Noncommercial	1162	186	6.2	4810	4.1 days
Total	1685	234	7.2	7177	4.3 days

The Owyhee River is in the area of the ancient Miocene Humboldt and Bruneau Lakes, indicating a potential for underlying petroleum bearing rock strata. However, there is no direct evidence that the area is favorable for oil and gas resources. Even if Paleozoic rock strata lie at depth, it is likely that any associated hydrocarbons were driven off during the most recent Tertiary thermal episodes that formed the area's thick mantle of rhyolite and basalt rocks.

The 120 mile portion of the Owyhee River in Malheur County, Oregon is a portion of an important geothermal resource area known as the Battle Mountain Heartflow High. The area currently is being investigated and evaluated for its geothermal potential. The proximity of several hot springs and the presence of recent volcanic activity indicates possible future energy development potential, although no sites of commercial potential are known to be within the Owyhee River canyon. To date, there are no geothermal leases within the canyonlands.

Within the Vale district, a utility corridor is identified crossing the Owyhee in the vicinity of Rome, Oregon. Environmental assessments will be prepared prior to issuing any rights-of-way within this corridor.

Military Operations

The entire southeast portion of Oregon and southwest portion of Idaho is designated by the Department of Defense and the Federal Aviation Administration as a Military Operations Area (MOA). This MOA is used for training military pilots in low elevation, subsonic flight in mostly fighter-bomber type aircraft. The U. S. Air Force projects multiple flights per day over different flight patterns at altitudes as low as 100 feet. It is also projected that low elevation flights of B-52 bombers will occur throughout the canyon complex in Oregon and Idaho.

User Profile and Visitation Estimates

Recreation Activity Preference

Outstanding recreational opportunities are available in the canyons, including drift boating, rafting, kayaking, hiking, backpacking, horseback riding, photography, nature study, rockhounding, fishing, hunting and camping. The Owyhee is rapidly becoming recognized as a prime early-season whitewater river and is becoming increasingly popular with both commercial and noncommercial boating publics.

Information collected during a National River Recreation Study in 1980 (see Appendix B) indicates that most boaters visited the area to run rapids, view scenery, and to camp. About 50 percent of the boaters also enjoyed visiting archaeological and historical sites, and 42 percent like to do some hiking during rest or overnight stops.

Fishing is fair in the Owyhee River, with trout populations concentrated around the confluences of side drainages. Hunting is good to excellent for mule deer, sheep, chukar partridge and quail.

Vehicles and Other Specialized Equipment

Most boating is done by raft or kayak, while a few boating parties use canoes. Light, good quality rafts (up to 15 feet long) are preferred due to several difficult rapids and portages.

The National River Recreation Study determined that 75 percent of the boats used by noncommercial parties on the Owyhee during 1980 were rafts and 19 percent were kayaks. Rafts made up 96 percent of boats used by outfitters.

Conventional two-wheel drive vehicles can be used for access at Three Forks, Rome and Leslie Gulch. Four wheel drive vehicles are suggested for boating access at all other access points. Hunting is also facilitated by the use of four-wheel drives, while backpackers can get by with conventional, preferably high clearance vehicles.

Seasons and Times of Use

The river can normally be floated during the high water period from February through June. Cold and stormy weather in February and March discourages use during these months. The length of the boating season depends on winter snowpack and runoff rates, and will vary from year to year. However, most of the boating use on the river occurs over a six week period, from May 1 to June 15. Very high use levels have been reported over the Memorial Day weekend (refer to Graph 1).

After extremely dry winters, such as 1977 and 1981 there was not enough run-off to allow extended boating use of the river. As with most free flowing rivers, peak flows during normal years make boating unsafe for short periods of time.

Before engaging in hunting or fishing, visitors must have the proper Oregon Department of Fish and Wildlife licenses and tags to comply with game and fish laws.

Length of Stay

For boaters starting at the uppermost put-in points on the main stem and South Fork, and taking out at Three Forks, the average length of stay is six days.

Boaters utilizing the Three Forks to Rome section average three day float trips, while those visitors on the Rome to Leslie Gulch section average five days to complete the trip (refer to Table 1).

The average length of stay for big game hunters within the Owyhee River canyon complex is four days.

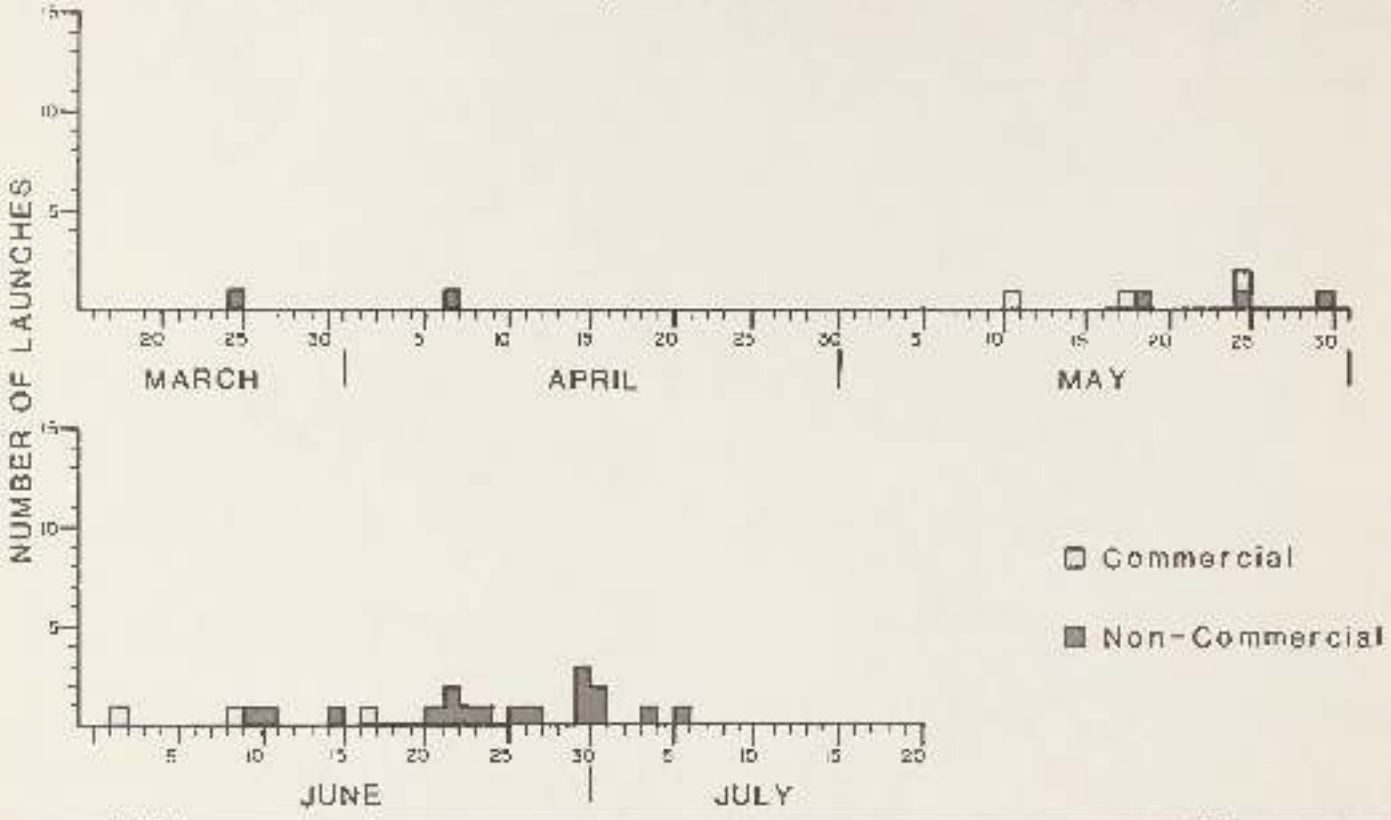
Party Size

Above Three Forks, the average party size for noncommercial boating use is eight to nine people, while the size of commercial boating parties averages ten people. The special recreation permits issued by the BLM for commercial boating use stipulate that the size of commercial parties not exceed 15 people on this river section.

From Three Forks to Rome, the average noncom-

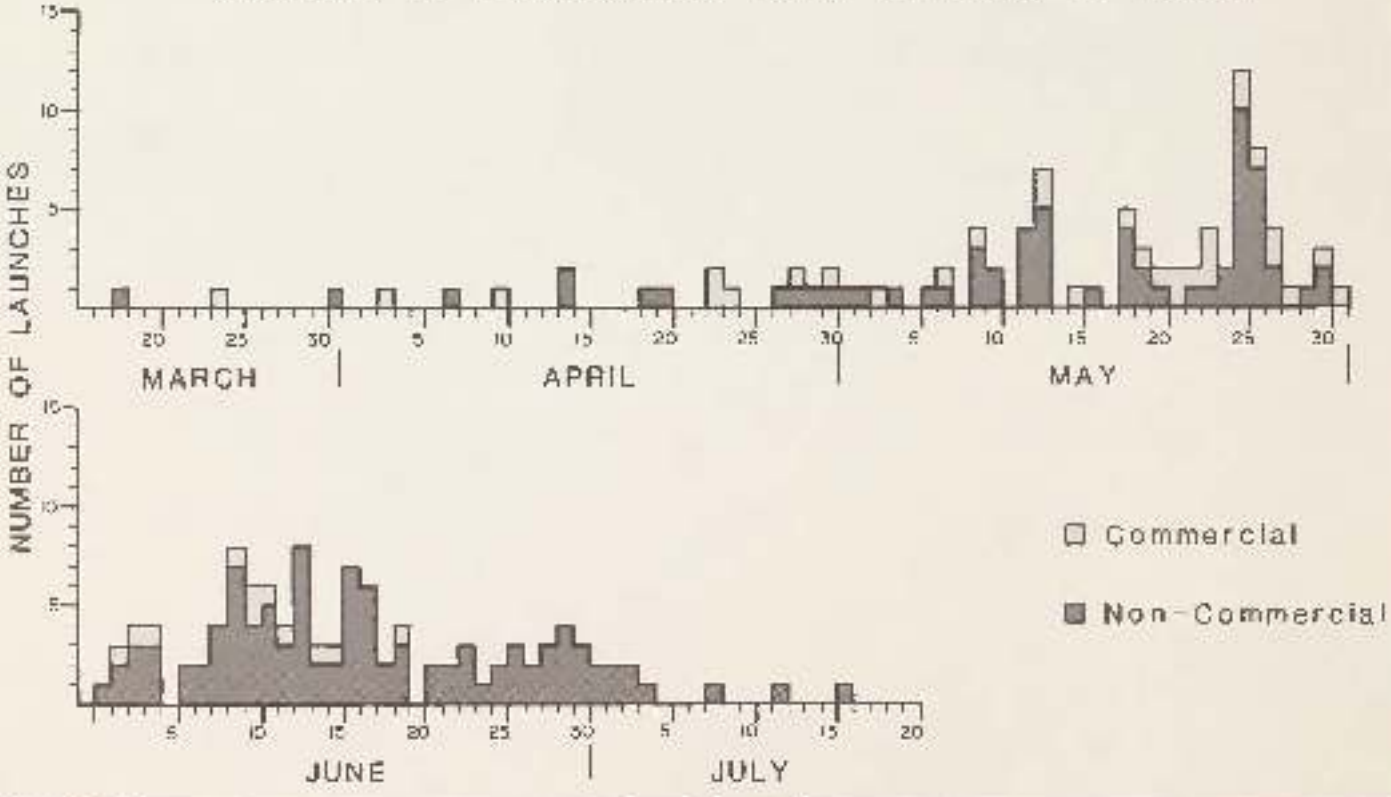
Graph I

NUMBER OF LAUNCHES, 1984 SEASON AT THREE FORKS



Graph II

NUMBER OF LAUNCHES, 1984 SEASON AT ROME



mercial boating party consists of four to five people; while the commercial party size is from five to six people (refer to Table 1). Through special recreation permits the BLM has limited the group size of commercial parties to 15 people.

From Rome to Leslie Gulch, the average noncommercial party size is four to five persons; while the commercial party size is from ten to twelve. The group size of commercial users on this segment has been limited to 20 people.

There are no estimates of the average party sizes for other types of recreation activities.

Place of Origin

The National River Recreation Study found that in 1980, 60 percent of the boaters lived in Oregon, 14 percent were from Idaho, 12 percent from Washington, 7 percent from California, and 7 percent lived in other states.

Most backpackers came from Idaho and Oregon, while most hunters were residents of the state within which use occurred. Some out-of-state big game hunters do visit the canyons in search of trophies.

Visitation Estimates

The BLM has been recording boating use data on the middle and lower Owyhee since 1974. River use climbed from 482 people in 1974 to a high of 2,057 people in 1980. The following discussion details use estimates for the 1984 boating season, the third highest use level on record (refer to Table 2).

Upper Segment: Owyhee River Above Three Forks

Based on telephone information requests an estimated 20 to 30 noncommercial parties, totaling 150 to 300 boaters, floated the Owyhee River above Three Forks during the 1984 boating season.

Regulations established by the Idaho Outfitters and Guides Board limit the number of commercial boating operations allowed on specific rivers within Idaho. The regulations provide that no more than six commercial outfitters are allowed on the main

Table 2 Annual Visitor Use 1974 through 1984

	74[1]	75[1]	76[1]	77[1,2]	78[1]	79[1]	80[1]	81[1,3]	82[3]	83[3]	84[3]
Three Forks to Rome											
Commercial	25	14	34	0	107	118	219	5	114	127	52
Noncommercial	60	60	50	30	92	204	262	23	239	144	95
Total	85	74	84	30	199	322	482	28	353	271	147
Below Rome											
Commercial	237	233	254	0	412	436	771	90	325	592	461
Noncommercial	160	250	390	50	368	721	800	50	936	1010	1077
Total	397	483	654	50	830	1161	1571	140	1261	1602	1546
Total River											
Commercial	262	247	288	0	519	555	990	95	439	719	525
Noncommercial	220	310	440	80	470	927	1063	73	1175	1154	1162
Total	482	557	738	80	989	1485	2053	168	1614	1873	1686

[1]Figures from Vale District Owyhee River Visitor Statistics, 1974 through 1977, by G. Meyer.
[2]Low numbers due to low water flow.
[3]Noncommercial figures from Owyhee River Register; commercial figures from Recreation Use Permit Post Used Questionnaire.
[4]Figures from National River Recreation Use Survey, USFS, North Central Forest Experiment Station, St. Paul, MN.
[5]Figures from Owyhee River Register.

stem from the Duck Valley Indian Reservation to the Oregon stateline. This regulation effectively limits commercial use of the wild section above Three Forks to six outfitters in Oregon as there is no river access at or below the stateline. Commercial use above Three Forks is estimated at 50 persons in 1984.

Middle Segment: Three Forks to Rome

BLM special recreation use permits for the middle and lower river segments were issued to 55 commercial outfitters in 1984. Six commercial trips totaling 82 persons floated from Three Forks to Rome. Recreation permits are not required for noncommercial boaters, and 21 noncommercial trips totaling 85 persons registered voluntarily to float this segment (refer to Table 1).

Lower Segment: Rome to Owyhee Reservoir

Forty-two commercial groups totalling 461 persons floated from Rome to the Owyhee Reservoir in 1984. One hundred sixty-five noncommercial parties totaling 1,077 persons registered voluntarily for this stretch of the river. An estimated total of 207 groups and 1,536 persons floated the lower segment of the main stem in 1984 (refer to Table 1).

In 1984, total whitewater visitor use on the three river segments during the control period of March 15 to June 30 is estimated at 264 groups and 1,960 people. Of this use, 14 percent occurred on the upper segment, 8 percent on the middle segment, and 78 percent on the lower segment.

Fishing use is light and is done in conjunction with backpacking, hunting and late season boat trips. There are no estimates of the amount of hunting and backpacking use that occurs within the canyon.

Major Issues

The recognition and resolution of important issues is the key to successful planning and management. This section identifies critical issues to be considered in the management plan presented in Part III.

Issue I - Administrative and Withdrawal Boundaries (refer to Fig. 6)

Comment

With the passage of Public Law 98-494, the Owyhee River within Oregon became a component of the National Wild and Scenic Rivers System. The Wild and Scenic Rivers Act requires the establishment of an administrative boundary and a withdrawal boundary.

Considerations

A. Administrative Boundary (refer to Fig. 6)

1. Boundary not to exceed 320 acre-per-mile average.

B. Withdrawal Boundary (refer to Fig. 6)

1. Federal land withdrawn from land and mineral entry one quarter mile from river bank.

Issue II - Level and Degree of Administrative Control

Comment

Recent increases in recreation use and potential energy exploration are among the factors that have focused attention on the need to more closely manage use of the Owyhee River. The degree of management and methods of administration needed require thorough examination.

Considerations

A. Administration

1. River Segment Management Jurisdiction

2. Special Recreation Permits and Noncommercial Party Registration

B. Supervision

1. Visitor Use Supervision
2. Recreational Use Monitoring
3. Visitor Use Allocation System and Fee Schedule
4. River Information and Education Program
5. Search and Rescue

C. River Craft Conflicts

1. Types of River Craft Allowed

D. Road Access

1. New Access Development

E. Facility Management

1. Future Developments and Maintenance of Existing Facilities
2. Sign Program
3. Staff Water Gauges

Issue III - Environmental Protection

Comment

The Owyhee River possesses resource values of national significance. Its natural and cultural features are exceptively fragile, and require protection from excessive recreation, grazing and other potentially damaging uses.

Considerations

A. Natural Values

1. Off Road Vehicle Use
2. Livestock Grazing Within Canyon
3. Land and Mineral Entry in River Corridor
4. Mining Claim Regulation
5. Construction of Water Impoundments
6. Recreation Use Conflicts

B. Wildlife and Vegetation Values

1. Bighorn Sheep, Waterfowl Populations and Threatened and Endangered (T & E) Plants

C. Cultural Values

1. Cultural Resources Survey

Issue IV - Land Ownership

Comment

Of the total land area on the Owyhee River (38,400 acres), 88 percent or 33,720 acres is public land, 4 percent or 1,670 acres is state land, and 8 percent or 3,010 acres is private land.

Considerations

A. Acquisition/Easements

1. Scenic Easements and Land Exchanges, Land Purchase and Gifts of Land

B. Access

1. Access Easements on Private Land

C. Withdrawal Review

1. Bureau of Reclamation Withdrawals

Issue V - Management Cooperation Between Agencies

Comment

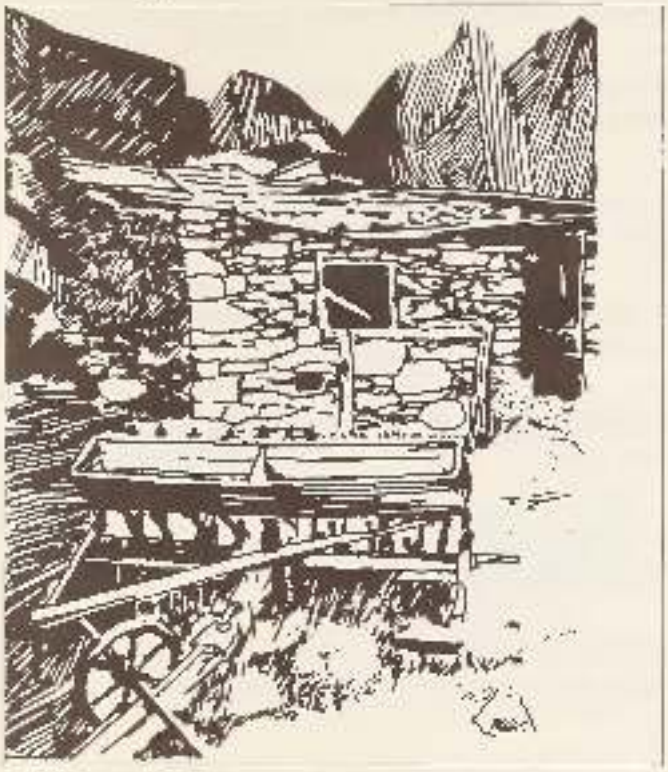
Although most of the land along the Owyhee is managed by BLM, several other federal, state and local government agencies have vested interests in the resources of the Owyhee River Canyonlands. BLM cannot effectively manage the river area without interagency support and cooperation, and should explore ways of improving formal communication regarding river management.

Considerations

A. Management Agreements with Federal, State and Local Agencies

1. Develop Management Programs

Part II - Management Objectives and Constraints



Management Objective

The Owyhee River will be managed to preserve its wild and primitive qualities. Visitor and resource management will strive to enhance opportunities for high quality, primitive recreation experiences. Recreation and other resource uses will be permitted to the extent that natural and cultural characteristics of the river environment are not degraded.

The following objectives will guide future management and use of the Owyhee River Canyon. In accomplishing objectives, the BLM will involve and cooperate with other public agencies, private interests and resource users.

1. Resource Management

a. Manage the river canyon to protect its primitive environment. Maintain a natural setting that provides outstanding opportunities for solitude and for primitive and unconfined recreation activities. Management will adhere to BLM guidelines for managing wilderness study areas, and Oregon's regulations for designated state scenic waterways.

b. As required by the Wild and Scenic Rivers Act and the Presidents 1979 Environmental Message, maintain the free-flowing condition of the Owyhee River. Water quality will be maintained in accordance with state and federal water quality standards.

c. Manage the river canyon to protect the habitats for fish and wildlife species. Cooperate with the Oregon Department of Fish and Wildlife in protecting and restoring habitats for fish and wildlife, with particular emphasis given to bighorn sheep, river otter and Canada geese.

d. Manage the river canyons to protect significant cultural resource sites. Cooperate with State Historic Preservation Office to protect and stabilize resources on state and private lands.

e. Negotiate to obtain appropriate easements or land acquisitions on state or private lands when necessary to protect the canyon environment, or preserve recreation use.

f. Manage livestock use in a manner that will not adversely affect the natural, recreational and

cultural values of the river canyon.

g. Oil and gas leases will be accomplished under regulations designed to protect natural, cultural and recreational resources.

2. Recreation Management

a. Manage recreation use in keeping with the capacity of the canyons to sustain a high quality primitive experience. Use levels will be established to provide a primitive recreational experience with a high degree of solitude and minimal effect upon the natural canyon environment.

b. Manage recreation use in the canyons to protect wildlife habitats and endangered plant species. Use levels will optimize recreation opportunities without endangering wildlife and plant populations.

c. Provide the minimum necessary public use facilities and road access to fulfill management needs.

d. Monitor and evaluate visitor and resource management programs to identify needed plan modifications.

e. Establish a mandatory permit system for all river uses and allocate use between noncommercial and commercial users only when monitoring indicates use capacities are being reached and no other management options are effective.

f. Develop an interpretation program to aid visitor and resource management. The program should focus on (1) visitor safety; (2) visitor awareness of natural and cultural resources; (3) environmentally acceptable visitor behavior to protect natural and cultural resources.

Management Constraints

Factors which, because of law, policy, regulation or circumstance (see Appendix C) influence the development of a management program presented in Part III include:

1. The Oregon Owyhee River segments are included in the National Wild and Scenic River system;

2. Portions of the river corridor are included within four wilderness study areas (WSAs);

3. Two river segments are presently designated as Oregon Scenic Waterways;

4. Several plant species listed as 'sensitive' occur within the river corridor;

5. Many significant historic and prehistoric sites exist within the canyon complex;

6. Reestablished bighorn sheep within the Owyhee canyon complex;

7. Vehicle access is limited throughout much of the river area;

8. There are a limited number of large campsites on all sections of the river;

9. Many of the whitewater rapids on the Owyhee River are hazardous to river visitors;

10. The Owyhee River has a short spring boating season;

11. Limited escape cover exists for waterfowl.

Part III - The Management Program Actions

The management program involves 26 distinct actions to resolve issues and accomplish management objectives. The five major issues identified and discussed in Part I are listed below, along with the planned management actions.

Issue I - Administrative and Withdrawal Boundaries

A. Administrative Boundary

Action I.A.1. - Management of Public Land Within Administrative Boundary (refer to Fig. 6)

All land and resource uses within the administrative boundary on Public Land will be managed in accordance with the Wild and Scenic Rivers Act, insuring that the river corridor will remain in its wild and pristine state as intended by Congress.

Discussion

Public Law 98-494 amended the Wild and Scenic Rivers Act to include the Owyhee River as a component of the National Wild and Scenic Rivers System. The Act required that an administrative boundary along the 120 mile river corridor be established, and that this boundary not exceed an average of 320 acres per mile. The administrative boundary was established from rim to rim where the canyon does not exceed one-half mile wide. Where the canyon does exceed one-half mile in width from rim to rim, a minimum set back of one-quarter mile on legal land subdivisions was used. Total land acreage within the administrative boundary is 38,400 acres (refer to Appendix D).

B. Withdrawal Boundary

Action I.B.1. - Management of Public Land Within Withdrawal Boundary (refer to Fig. 6)

All Public land within one-quarter mile of the mean high water line on each side of the Owyhee River will be managed to exclude mining and all land entry.

Discussion

With the issuing of Public Law 98-494 all public land within one-quarter mile of the Owyhee River within Oregon was withdrawn from land and mineral entry. This includes, but is not limited to, dam construction, water conduits, transmission lines, mining, rights-of-way, federal land sales or exchange, and other disposition under the public land laws of the United States. Total acreage withdrawn is 33,720 acres.

Issue II - Level and Degree of Administrative Control

A. Administration

Action II.A.1. - River Segment Management Jurisdiction

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.

Discussion

As directed by the Wild and Scenic Rivers Act Amendment of 1984, the Secretary of Interior (Bureau of Land Management) is to administer 120 miles of the Owyhee River within Oregon as a Wild River.

Action I.A.2. - Recreation Use Permits

The adjoining BLM districts will coordinate issuance of special recreation use permits for boat trips that cross district boundaries. Only one permit will be needed for trips within one or more BLM districts. Through an agreement between the Vale and Boise districts, the Vale district will administer the issuance of permits for commercial use of the Owyhee River.

A permit system for private boaters will not be initiated until monitoring indicates such action is needed to control use or to protect resources. A A mandatory boater registration system was started in 1983 to gather use data and to provide information to boaters. Commercial operators must have appropriate state licenses before obtaining a BLM permit.

Discussion

Permits control access to the river and usually should be the responsibility of the district (s) with the access routes. Close coordination between districts is needed for permitted trips that cross district boundaries.

To reduce confusion by the commercial river operators and provide for a more efficient permit procedure, one permit is required to operate on all sections of the Owyhee.

B. Supervision

Action II.B.1. - Visitor Use Supervision

1. Upper Section

The control period on the main stem above Three Forks and on the South Fork 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. Maximum group size will be 15 persons for commercial and noncommercial parties, including boatmen and support personnel.

2. Middle Section

The control period from Three Forks to Rome will normally be from April 1 to June 30. Flexibility will be allowed to adjust the control period for river flow and visitor use. Four starts per day will be allowed on the middle Owyhee with a maximum group size of 15 persons for commercial and noncommercial parties, including boatmen and support personnel.

3. Lower Section

The control period from Rome to Leslie Gulch will normally be from April 1 to June 30. Flexibility will be allowed to adjust the control period through river flow and visitor use. Six starts per day will be allowed on the lower Owyhee with a maximum group size of 20 persons for commercial and noncommercial parties, including boatmen and support personnel.

Discussion

The above control period and starts per day were established through the development process of the 1983 Owyhee River Management Plan.

Physical capacity studies have been completed for the middle and lower river segments, but have not been conducted on the Upper Owyhee. A user preference survey has been conducted on all three river segments. Environmental data has not been collected on any river segment.

Until a user carrying capacity study is completed for the Upper Owyhee an interim guideline of one start per day from the main stem and one start per day from the South Fork will optimize opportunities for primitive recreation, and will preserve the natural and cultural values of this river segment.

In 1979, physical data on the middle and lower river segments was gathered in the Owyhee River Carrying Capacity Study, conducted by the Organization for Recreational Resources Research and Consulting (ORRRC). The ORRRC study, coupled with historical use and public input, was the basis for establishing visitor use levels on the middle and lower sections of the Owyhee River.

During the 1980 boating season, sociological data on the upper, middle and lower river segments were gathered by the U.S. Forest Service, Backcountry River Recreation Project, North Central Forest Experiment Station, St. Paul, Minnesota. This study collected data on a wide range of subjects, including visitor group size, problems encountered, satisfaction and management preferences. Generally, the study found a high degree of satisfaction among river users on all river sections, and a preference for the minimum management level needed to protect the resource.

Historical use levels are lower than planned maximum daily use levels based on physical carrying capacity (refer to Table 1). In the near term, the maximum allowable use limits should only impact visitor use during peak periods, such as the Memorial Day weekend.

These use levels are subject to periodic review and adjustment (see Action II.B.2. and II.B.3.).

Action II.B.2. - Recreational Use Monitoring

Establish environmental, social and physical monitoring studies to determine impacts of human use on the river resource. Monitoring will include:

1. Periodic river patrols by raft or kayak.

2. Continuation of the campsite photo-point study began in the ORRRC inventory.

3. A mandatory river registration program for all boaters; establishment of registration boxes at all put-in points.

4. A mandatory recreation use permit for commercial users to authorize use.

5. Optional recreation trip survey forms at all boater take-outs to determine social attitudes of river users.

6. Completion of post-use questionnaires by commercial permittees.

7. Establishment of wildlife studies during periods of heavy recreational river use.

8. Conducting inventories of threatened and endangered plants, and cultural resources.

Discussion

The ability to provide proper recreation management depends upon knowing resource capabilities for withstanding visitor use. Three types of information are needed to determine proper visitor use capacities:

1. Physical information about campsite frequency and size.

2. Sociological information about the quality of recreation experiences and preferences.

3. Environmental information about the impacts of visitors upon resources.

Monitoring is essential to correlate use levels with

resource condition and capacity. Monitoring will precede establishment of a recreation use allocation system for commercial and noncommercial boaters.

Action II.B.3. - Visitor Use Allocation System and Fee Schedules

A visitor use allocation system will be established when social, physical or environmental use levels approach carrying capacity

Discussion

A system to enforce visitor carrying capacities and allocate use among user groups will not be implemented until monitoring indicates that environmental or social capacities are being reached or that increased supervision is needed to properly utilize the river's physical capacity. When monitoring indicates a need for river use allocation among commercial and noncommercial users, full public participation will be sought in developing the criteria to establish such a system.

Any allocation system will consider the interests of the Idaho Outfitters and Guides Board, as this board controls the number of outfitters operating on the upper Owyhee River.

All special recreation use fees will be in accordance with national BLM policy as established by the Director.

Action II.B.4. - River Information and Education Program

Develop an information and education program for users that focuses on:

1. Campsite locations and capacities.

2. Visitor awareness of natural and cultural resources.

3. Environmentally acceptable visitor behavior that will protect cultural resources, wildlife habitat and populations, the natural character of the river canyon, and the enjoyment of the area by recreationists.

4. Visitor Safety.

5. Respect for private property that contain river attractions.

Discussion

Providing information about how visitors can best conduct themselves will help alleviate potential resource conflicts, and minimize the need for additional management actions. This effort would also compliment the monitoring program.

Action II.B.5. - Search and Rescue

Establish a cooperative search and rescue agreement between the Vale District, Boise District and the Malheur, Owyhee and Elko County Sheriff's Departments. The agreement will outline the responsibilities of each agency and the amount and type of assistance the BLM can provide when requested by the sheriff's offices.

Discussion

The county sheriffs have primary responsibility for search and rescue. However, since BLM personnel are familiar with the area and BLM equipment may be most available, full cooperation and support will be given to sheriff departments.

C. River Craft Conflicts

Action II.C.1. - Types of River Craft Allowed

Allow no upstream motorized boat travel on the main stem or South Fork to the Oregon-Idaho stateline. 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. The use of helicopters by commercial or noncommercial boating parties for purposes of shuttling equipment, supplies and people will be prohibited. Helicopters may be authorized during search and rescue and other emergency operations and for wildlife management purposes. Existing airfields can continue to be used.

Discussion

Motors disturb the wildlife and solitude within the canyons and are not consistent with a primitive environment. Jet boats conflict with floatboating.

causing safety problems within the narrow canyon corridor

D. Road Access

Action II.D.1. - New Access Development

Develop no additional road access to the main stem of the Owyhee River. Maintain existing roads at their current low-standard of construction to allow passage of high clearance or four-wheel drive vehicles.

Discussion

Maintaining access roads at their current standards is consistent with the management objectives stated in Part II and the primitive characteristics of the Owyhee River area.

E. Facility Management

Action II.E.1. - Future Developments and Maintenance of Existing Facilities

Develop only minimum recreation facilities necessary for resource protection and primitive recreation management, such as an administrative complex at the Rome launch site and vault toilets proposed at boating access points. Continue maintenance of river campsites and existing structures at the Rome launch site.

Discussion

Temporary living quarters and office space is required to provide public service to river users.

Three Forks and the various put-in points receive concentrated use by river boaters and other recreationists. Action should be taken to avoid the anticipated sanitation problems and vegetation damage expected to occur on these fragile sites.

The Rome Launch Site and over 100 campsites along the river require periodic maintenance, insuring public health and safety.

Action II.E.2. - Sign Program

Instal directional signs along access roads. Install informational signs at boaters put-in points.

Discussion

Signing is helpful to direct people, and essential for implementing an information and education program that will help reduce the need for more intensive management practices.

Action II.E.3. - Staff Water Gauges

Install staff water gauges at boater put-in points that are easily readable.

Discussion

Information describing river characteristics at various water levels will allow boaters to anticipate potential conditions and problems.

Issue III - Environmental Protection

A. Protection of Natural Values

Action III.A.1. - Limit Vehicle Access in River Corridor

Motor vehicle use will be allowed on designated roads only.

Discussion

Steep slopes and fragile soils make the canyons unsuitable for vehicle use. Uncontrolled use of accessible areas of the canyons could cause long-term damage to habitat, and cause visual impacts that would impair the scenic quality of the canyon environment and detract from a primitive recreation experience.

By restricting vehicles to designated roads, the unauthorized and illegal collection of Indian and historic artifacts should be reduced.

Action III.A.2. - Control Livestock Within Canyon

Work cooperatively with ranchers to exclude livestock in the canyons and reduce grazing impacts on bottomlands and riparian areas.

Discussion

Concentrated livestock use impairs the natural values of the canyons. The exclusion of cattle would improve natural values as well as ease livestock management, provided alternative water sources are made available on surrounding plateaus.

Action III.A.3. - Exclude Mining and Land Disturbing Actions Within Designated River Corridor

Insure through project review and periodic river patrols that no mining or inconsistent land uses occur within the administrative boundary or withdrawal corridor.

Discussion

Under the Owyhee Wild River Act, one quarter mile on each side of the river is withdrawn from mineral and land entry. Land and mineral actions on private or state land must be in compliance with Oregon Scenic Waterway regulations.

Action III.A.4. - Regulate Existing Valid Mineral Rights to Protect Natural, Cultural and Recreation Values

Operation of existing valid mineral rights (prior to October 1, 1984) will be accomplished under regulations designed to protect natural, cultural, and recreation resources. In situations where serious adverse impacts cannot be avoided, the BLM will consider purchasing the mining rights or claims within the administrative boundary.

Discussion

The possible purchase of mining rights will be considered in extreme cases to prevent serious disturbance of natural, cultural and recreation resources.

Mining disturbance can be partially mitigated under the provisions of the Surface Protection Act. Mining activities are also regulated under 43 Code of Federal Regulations 3802 within wilderness study areas (WSAs) and 43 CFR 3809 in areas outside WSAs.

Action III.A.5. - Construct No New Water Impoundments on the River

Construct no new water impoundments on the Owyhee or its tributaries as directed by the Wild and Scenic Rivers Act. Coordinate this action with the Northwest Power Planning Council. Manage the area to maintain or improve water quality in accordance with State and Federal water quality standards.

Discussion

Water impoundments are inconsistent with the management of river segments designated as "wild" under the guidelines of the National Wild and Scenic Rivers Act and Oregon state Scenic Waterway regulations. They are also not generally consistent with management of lands under wilderness study.

Action III.A.6. - Recreation Use Conflicts

Establish recreation use regulations that minimize recreation use conflicts with other resource values.

Discussion

Regulations will include stipulations to require fire pan use and garbage pack out, and will specify requirements for firewood collection and removal of human refuse. These stipulations will change as recreation use conflicts develop or diminish.

B. Wildlife and Vegetation Values

Action III.B.1. - Monitor Bighorn Sheep, Waterfowl and Threatened and Endangered (T & E) Plants

Monitor bighorn sheep and waterfowl populations to detect changes in species numbers and habitat use. Monitor T & E plant species to determine possible impacts from recreational use of the river corridor. Adjust recreation carrying capacities, manage access and initiate visitor education programs as necessary to allow for the expansion of bighorn sheep and maintenance of waterfowl populations, and the preservation of threatened and/or endangered plant species.

Discussion

Bighorn sheep and waterfowl are sensitive to human presence. The level at which human impact becomes detrimental is not known. Recreational impact on known T & E plant species is unknown. Management will study the effects of increased in recreational use on bighorn sheep, waterfowl and T & E plants so that adverse effects can be detected and corrections implemented before serious problems occur.

C. Cultural Values

Action III.C.1. - Conduct Class III Cultural Resources Survey

Develop a cultural resources plan to inventory and evaluate historic and archaeological sites. As a result of data collected, conduct a Class III cultural resources survey on specified sites to develop programs for the preservation and interpretation of cultural. Nominate suitable sites or areas for listing in the National Register of Historic Places.

Discussion

Important cultural sites are being destroyed by artifact collectors and vandals. For sites of significant value and/or under an immediate threat of vandalism, salvage by competent authority must be considered. Recreationists enjoy visiting the more interesting sites, especially caves, cabins and abandoned homesteads, many of which are privately owned.

Issue IV - Land Ownership

A. Acquisition/Easements

Action IV.A.1. - Negotiate Purchases, Gifts, Exchanges and Scenic Easements on State and Private Land

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

Discussion

Negotiated purchases, exchanges, land gifts and scenic easements with private and state land owners are valuable tools for preserving the primitive environment of the river corridor.

B. Access

Action IV.B.1. - Negotiate Access Easements Across Private Land

Negotiate recreational access easements across private property where necessary to allow public access to the river corridor.

Discussion

Future development and/or change in ownership of private properties could result in the loss of public access to the river.

Action IV.C.1. - Bureau of Reclamation Withdrawals

Revoke all Reclamation withdrawals along the river corridor and return public lands to total BLM management.

Discussion

All Bureau of Reclamation withdrawals within the wild river administrative boundary have been relinquished, however a Public Land Order has not

been issued. Upon approval by the Secretary of Interior, the withdrawals will be revoked and responsibility and accountability for the lands will transfer to the Bureau of Land Management.

Issue V - Management Cooperation Between Agencies

A. Management Agreements with Federal, State and Local Agencies

Action V.A.1. - Develop Management Programs

Where applicable, coordinate the visitor and resource management program with private land owners and the following federal, state and local agencies:

1. Boise District - Bureau of Land Management

2. Elk District - Bureau of Land Management

3. U. S. Fish and Wildlife Service

4. Bureau of Indian Affairs

Duck Valley Indian Reservation

5. Department of Defence - U. S. Air Force

6. Northwest Power Planning Council

7. State of Oregon-
   - Scenic Waterways
   - Scenic Waterways
   - Department of Fish and Wildlife
   - Division of State Lands
   - Water Resources Department
   - State Historic Preservation Office

8. State of Idaho-
   - Outfitters and Guides Board
   - Department of Water Resources

9. Malheur County, Oregon
   Owyhee County, Idaho
   Elko County, Nevada

10. North and South Board of Control, Owyhee Irrigation Project

Discussion

The above agencies either manage resources, control access routes, have land ownership, provide search and rescue, or license commercial operators (Idaho) on the Owyhee and South Fork Rivers. Low flying military aircraft disrupt the natural serenity of the canyon and lessen the sense of solitude and isolation it provides. Flights may also disturb California bighorn sheep and other wildlife species associated with the canyon corridors. Support and cooperation between agencies is necessary to effectively and efficiently manage the river.

Part IV - Implementation Phasing and Cost Estimates

The actions identified in this management plan have been combined into four main categories for budgeting purposes. These categories include land acquisition (purchase, gift, exchange or scenic easement), annual operation and maintenance, program management, and facility development.

Following are cost estimates for the Owyhee River management program based on Fiscal Year 1985 dollar values.

— Land Acquisition

The identified cost targets are administrative only and are based on per acre case load history. No land appraisals have been conducted within the river corridor.

Private Land — 3,010 acres - $150,000

State Land — 1,670 acres - $ 84,000

— Annual Operation and Maintenance

This category includes maintenance of over 100 campsites, the Rome Launch Facility, boater registration installations and Owyhee Canyon Overlook facilities.

120 miles Wild River and Rome Launch Facility — $90,000

— Annual Program Management

Funding includes development of education/information programs, permit systems, vehicle costs, equipment charges, and monitoring programs.

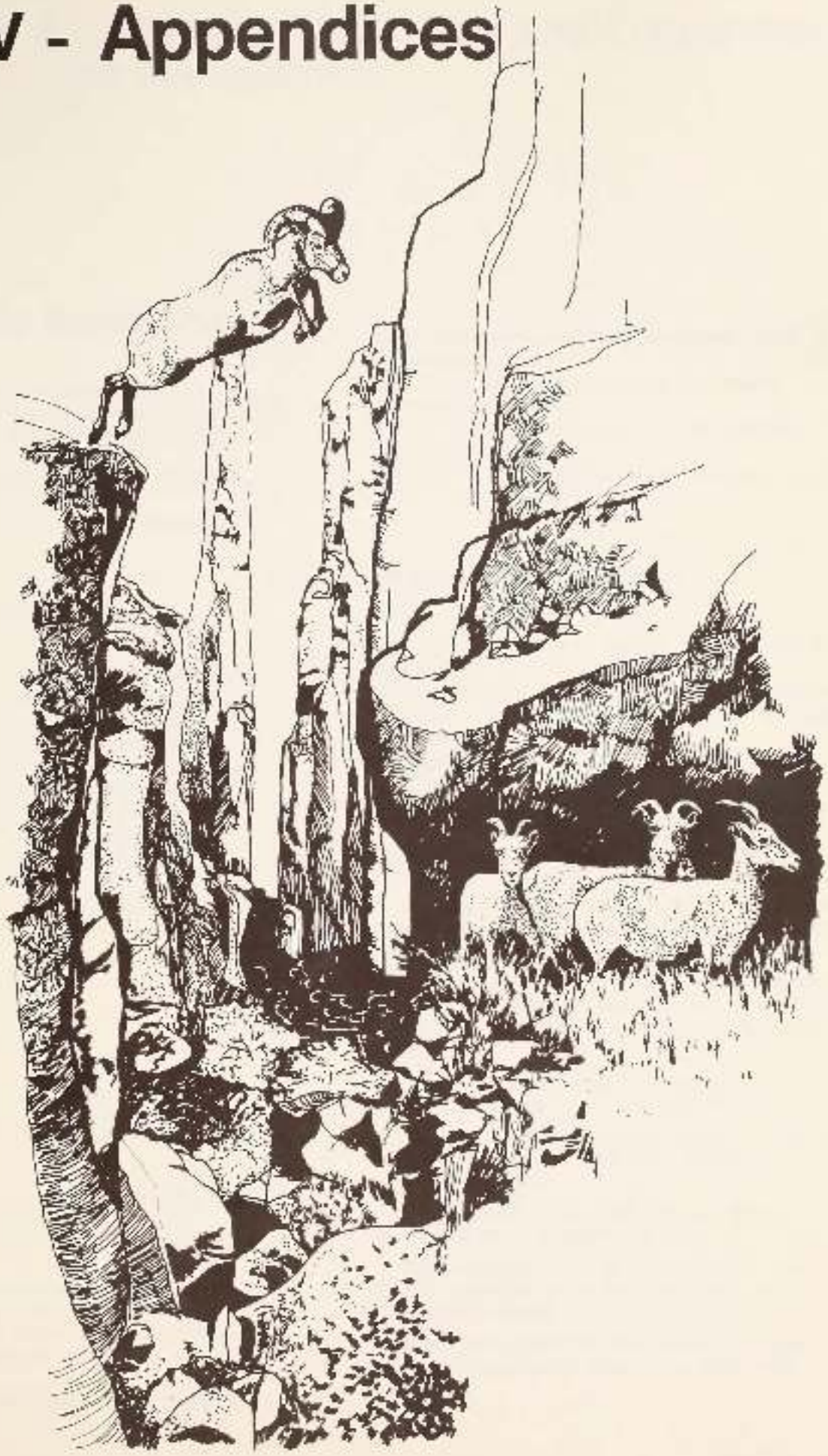
Administrative Overhead — $30,000

— Facility Development

This includes the survey, design and construction of a launch site administrative building (river ranger headquarters) at Rome and restrooms at Three Forks.

River Project Development — $130,000

Part V - Appendices



Appendix A - Planning Participants and Cooperators, Bureau of Land Management

Management Participation

Pearl Parker,District Manager, Vale
Dave Lodzinski, Associate District Manager, Vale
Raymond Monroe, Southern Malheur Resource Area, Manager
Conrad Bateman, Acting Northern Malheur Resource Area, Manager
Thomas Moore, Assistant District Manager, Resources

Staff Participation

Gerald Meyer, Outdoor Recreation Planner
Duane Marti, Cultural Resource Specialist
Philip Rumpel, Range Conservationist
Richard Conrad, Wilderness Specialist
Michael Crouse, Fisheries Biologist
Robert Kindschy, Wildlife Biologist
Sheldon Saxton, Realty Specialist
Thomas Forre, Range Conservationist
Michael Williams, Safety Officer
Patricia Garis, Engineering Technician
Barry Rose, Public Affairs Specialist
Mark Davis, Landscape Architect
Daniel Brown, Soil Scientist
Singh Ahuja, Geologist
Bonnie Rosen, Clerk-typist
Lynne Forre, Editorial Assistant

Owyhee River Management Plan Ad Hoc Work Group

John Lilly, Director, Assist Administrator, Oregon State Parks Division,Scenic Waterways
Paul Donheffner, Director, Oregon State Marine Board
Robert Sayre, Supervisor, S.E. Region, Oregon Department of Fish and Wildlife
Maxwell Lieurance, Malheur County Judge
John Bishop, Chairman, Vale District Advisory Board
Robert Sevy, Owner-Outfitter, Sevy Guide Service
Albert Ainsworth, President, Northwest Rafter Association
Don Tryon, Representative, Oregon Natural Resources Council
Jim Anderson, Property Owner and Rancher, Owyhee River Canyon
Marty Rust, Property Owner and Rancher, Owyhee River Canyon

Public Participation

The process leading to the publication of this draft management plan has included numerous opportunities for public participation. The following documents, developed over the last several years, included extensive public input.

— Malheur County Land Use Plan.

— Designation of two segments of the Owyhee River as an Oregon State Scenic Waterway.

— Oregon State Comprehensive Outdoor Recreation Plan.

— National Park Service study of the Owyhee River for inclusion in the National Wild and Scenic Rivers System.

— National Park Service Environmental Impact Statement concerning Owyhee River as a candidate for inclusion in the National Wild and Scenic Rivers System.

— Northern Malheur Resource Area and Southern Malheur Resource Area Land Use Plans.

Northern Malheur Resource Area and Southern Malheur Resource Area Grazing Environmental Impact Statements.

— Development of the 1983 Owyhee River Recreation Area Management Plan.

— Congressional hearings prior to Public Law 98-494, establishing the Owyhee River as a National Wild River.

— Owyhee Canyonlands Environmental Impact Statement concerning wilderness designation.

Appendix B - Bibliography and Publications of Interest

Alkens, C. Melvin; David L. Cole, and Robert Stuckenrath. 1977. Excavations at Dirty Shame Rockshelter, southeastern Oregon. Tebiwa, Miscellaneous Papers of the Idaho State University Museum of Natural History, No. 4 Pocatello.

Arighi, Scott; Arighi, Margaret S.
1974. Wildwater Touring, Techniques and Tours. Macmillan Publishing Co., Incl. Collier Macmillan publishers, London.

Borenson, Keo; Ula Moody, and Kelly Murphey.
1979. Cultural Resources Overview for The Bureau of Land Management, Vale District, Oregon. Cultural Resource Management Reports. No. 3. Sandpoint, Idaho: Cultural Resource Consultants.

DeForge, James R.
1972. Man's Invasion Into the Bighorn's Habitat. Trans. Desert Bighorn Council 16:112-115.

DeGrazia, Sebastian.
1964. Of Time, Work, and Leisure. Garden City, New York: Doubleday and Company, 1964.

Dunaway, David J.
1971. Human Disturbance as a Limiting Factor of Sierra Nevada Bighorn Sheep. Trans. 1st N.A. Wildsheep Conf. 1.165-173.

Ferrier, G.J.
1974. Bighorn Sheep Along the Lower Colorado River, 1974-2050. Trans. Desert Bighorn Council 18:40-45.

Fretwell, Hazel R.
1973. The Owyhee Crossing. Owyhee Outpost. No. 4. Murphy Idaho: Owyhee Historical Society

Garren, John.
1974. Oregon River Tours. Binford and Mort, Thomas Binford, Publisher.

Geist, V.
1971. Mountain Sheep: A Study in Behavior and Evolution. University of Chicago Press. 383 pp

Haines, Francis D., Jr.
1965. The Journal of John Work 1830-31. PHD thesis. Pullman: Washington State University.

Hanley, Mike with Ellis Lucia.
1975. Owyhee Trails. Caldwell: The Caxton Printers.

Hanley, Mike with Omer Stanford.
1976. Sagebrush and Axle Grease. Caldwell: Shorb Printing Company.

Idaho Historical Society
1965. Camp Three Forks. Reference Series No. 358. Boise. 1966. The Skinner Road. Reference Series No. 427. Boise.

Mathew, Geoffrey W.; William H. Blackburn.
1982. Draft Report. Assessments for Geology, Energy, and Minerals (GEM) Resources. Owyhee River GRA.

Nash, Jay B.
1960. Philosophy of Recreation and Leisure. Dubuque, Iowa: William Brown Company.

Nelson, M.
1966. Problems of Recreational Use of Game Refuges. Trans Desert Bighorn Council 10:13-20

McQuivey, R.P.
1978. The Bighorn Sheep of Nevada. Nevada Dept. Fish and Game Biol. Bull. No. 6 Reno. 81 p.

Oregon State University.
1979. Shelby, Bo; Danley, Mark. allocating River Use.

Pfister, Robert E.; Donhelfner, Paul E.
1979. Organization for Recreational Resources Research and Consulting (ORRRC), Owyhee River Visitor Carrying Capacity Study.

Rodney, Lynn S.
1966. Administration of Public Recreation. New York: Golcon Press

Steward, Julian H. and Erminie Wheeler-Voegelin.
1974. The Northern Paiute Indians. New York: Garland Publishing Inc.

University of Oregon Outdoor Program, Owyhee River Campsite Inventory. 1978.

USDA - Forest Service.
1980. Backcountry River Recreation Project, North Central Forest Experiment Station. National River Recreation Study: Owyhee River.

USDA - Forest Service; USDI Bureau of Land Management; USDI Park Service; University of Nevada Reno.
1981. Proceedings of a National Conference, Recreation Use Allocation

USDI - Bureau of Land Management.
1982. Owyhee River Whitewater Floatboating Report, Vale District Office.

USDI - Bureau of Land Management.
1983. Recreation Area Management Plan - Owyhee River, Vale District Office.

USDI - National Park Service.
1979. Final Report - Environmental Statement; Owyhee Wild and Scenic River Study.

Wehausen, J.D.
1980. Sierra Nevada Bighorn Sheep: History and Population Ecology PHD. diss. Univ. of Michigan. Ann Arbor 240 p.

Wilson, Larry O.
1968. Distribution and Ecology of the Desert Bighorn in Southeast Utah Div. Fish and Game 68 (5):220 pp.

Appendix C - Applicable Federal and State Laws and Regulations

- The Wild and Scenic Rivers Act, Amendment: Public Law 98-494; 98th Congress, S.416; October 19, 1984.
- The Wild and Scenic Rivers Act: Public Law 90-542; 90th Congress, S.119; October 2, 1968
- Federal Land Policy and Management Act: Public Law 94-579; 94th Congress, S.507; October 21, 1976.
- Wilderness Act: Public Law 88-577; (S.4); September 3, 1964.
- Interim Management Policy and Guidelines for Lands Under Wilderness Review, Bureau of Land Management.
- 43 Code of Federal Regulations: Subchapter F - Wildlife Management (6000); Subchapter H - Recreation Programs (8000).
- Oregon Scenic Waterways Act (ORS 390.845).
- Oregon Administrative Rules, Chapter 736, Division 40 - State Parks and Recreation Division.

Appendix D - Legal Descriptions of Administrative Boundary

Legal description of administrative boundary commences at Oregon-Idaho stateline and goes down stream as follows

Legal Description

Map No.	Township South	Range East	Meridian W. M.	Section		Subdivision
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.	35	R. Rim	Traverse identifiable rim through E½ E½
					L. Rim	Traverse identifiable rim starting at the N½ SE¼ SE¼ and ends at the N½ NW¼ NW¼
	37	48	W. M.	24	R. Rim	Traverse identifiable rim starting at the S½ SE¼ SE¼ and ends at the N½ SW¼ NW¼
				26	L. Rim	Traverse identifiable rim starting and ending in the N½ NE¼ NE¼
				23	R. Rim	Traverse identifiable rim starting in the N½ SE¼ SE¼ and ends in the E½ NW¼ NE¼
					L. Rim	Traverse identifiable rim starting in the S½ SE¼ SE¼ and ends in the E½ NW¼ NW¼
				14	R. Rim	Traverse identifiable rim starting in the E½ SW¼ SE¼ and rim ends in the SW corner of the SE¼ SE¼ NE¼ and along east-west boundary line between the NE¼ and SE¼, fence north along section line between Sec. 13 and 14 to identifiable rim in the NE¼ SE¼ NE¼ and ends in the E½ NE¼ NE¼
					L. Rim	Traverse identifiable rim starting in the S½ SW¼ SW¼ and ends in the N½ NW¼ NW¼
				15	R. Rim	Traverses identifiable rim starting and ending in the N½ NE¼ NE¼
1 of 17	37	48	W. M.	11	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SE¼ and ends in the N½ SW¼ NW¼
				10	L. Rim	Traverses identifiable rim starting in the S½ SE¼ SE¼ and ends in the N½ SW¼ NW¼
2 of 17	37	48	W. M.	11	R. Rim	Traverses identifiable rim starting and ending in the NW¼ NW¼
				10	R. Rim	Traverses identifiable rim starting and ends in the NE¼ NE¼
					L. Rim	Traverses identifiable rim starting and ending in the N½ NW¼
				3	R. Rim	Traverses identifiable rim starts in the SE¼ SE¼ and ends in the NW¼ SW¼
				9	L. Rim	Traverses identifiable rim starts and ends in the N½ N½
				4	R. Rim	Traverses identifiable rim starts in the E½ NE¼ SE¼ and ends in Lots 3 and 4
					L. Rim	Traverses identifiable rim starts and ends in the SW¼ SW¼
				5	L. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ends in Lot 4
2 of 17	36	46	W. M.	32	R. Rim	Traverses identifiable rim starting and ending in the SW¼ SW¼
				32	R. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ends in the NW¼ NW¼
					L. Rim	Traverses identifiable rim starting and ending W½ SW¼
2 & 3 of 17				31	R. Rim	Traverses identifiable rim starting at the section corner to the Section 29, 30, 31 and 32 and ends in the NE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ends in Lot 1
				30	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SE¼ 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 S½ SE¼ SE¼ and ends in the NW¼ NW¼
					L. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ends in the W½ NW¼ SE¼
				23	L. Rim	Traverses identifiable rim starting in the E½ SE¼ NE¼ and ends in the N½ NW¼ NE¼
				25	R. Rim	Traverses identifiable rim starting and ending in NE¼ NE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ending in the N½ NW¼ NE¼
3 of 17	35	47	W.M	13	R. Rim	Traverses identifiable rim starting and ending in the SW¼ SW¼
				14	R. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ends in the W½ SW¼ NW¼
					L. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ends in the W½ NW¼ SW¼
				15	R. Rim	Traverses identifiable rim starting in the E½ SE¼ NE¼ and ends in the W½ NW¼ NW¼
					L. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ends following the East West Section Line between 22 and 15 in the SW¼ SE¼ SE¼, thence west along east west section line between 15 and 22 to identifiable rim in the SW¼ SE¼ SW¼ thence along rim to NW¼ SW¼ SW¼
				16	R. Rim	Traverses identifiable rim starting and ending in the NE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the SE corner of SE¼ NE¼ SE¼ and ending at the center of the east west line between the NW¼ SE¼ and SW¼ SE¼ thence west along line to SW corner of NW¼ SE¼ thence north to identifiable rim to east west line between the NW¼ SW¼ NE¼ and SW¼ NW¼ NE¼ thence north at the SW corner of the NW¼ NE¼ thence to the north south section line between sections 16 and 17 in the SW¼ NW¼ NW¼ thence north along section line across drainage to identifiable rim in NW¼ NW¼ NW¼ and ending on the north section line between sections 9 and 16 ending NW¼ NW¼ NW¼
3 of 17				9	R. Rim	Traverses identifiable rim starting and ending in Lot 1 at the township line between 35S and 36S. Thence west along township line to common section corner to sections 32 and 33 T. 35S., 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 SW¼ NW¼ SW¼ thence diagonally east to the identifiable rim in SW¼ NW¼ SW¼ to SW corner of NW¼ NW¼ thence north along north south section line between 32 and 33 crossing drainage to identifiable rim and ending at the northwest corner of the SW¼ NW¼ NW¼
				32	R. Rim	Traverses identifiable rim starting and ending in the NE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ending N½ NE¼ NW¼
				28	R. Rim	Traverses identifiable rim starting SW¼ SE¼ SE¼ and ending in the NE¼ NW¼ NE¼
					L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ to north south subdivision line between the E½ and N½ of SW¼ across drainage to corner of the SW¼ NE¼ SW¼ thence east across drainage to identifiable rim thence along to ending in the N½ NE¼ NW¼
3 of 17	35	45	W. M	20	R. Rim	Traverse elevation line (4500 ft) north starting in the S½ SW¼ SE¼ and ending in the N½ NE¼ NW¼
					L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending N½ NW¼ NW¼
3 & 4 of 17				17	R. Rim	Traverses elevation line (4500 ft) north starting in S½ SE¼ SW¼ and ending in the E½ SE¼ SE¼
					L. Rim	Traverse identifiable rim starting in the S½ SW¼ SW¼ and ending E½ NE¼ SE¼
				21	R. Rim	Traverses elevation line (4500 ft starting and ending NE¼ NE¼

				16	R. Rim	Traverses elevation line (4500 ft) starting in the W½ SW¼ SW¼ to NW¼ corner of the NW¼ SE¼ thence east to east quarter corner between section 16 and 17 thence north along elevation line (4520 ft) ending in the N½ NW¼ NE¼
					L. Rim	Traverses north on elevation line (4400 ft) to the N½ NE¼ NW¼
4 of 17				9	R. Rim	Traverses elevation line (4400 ft) north starting in the in the S½ SW¼ SE¼ and ending in the E½ SE¼ SE¼
					L. Rim	Traverses elevation line (4400 ft) north starting in the SE¼ SW¼ and drops to 4300 ft elevation line and ending in the E½ NE¼ SE¼
				10	R. Rim	Traverses identifiable rim starting at the W½ SW¼ SW¼ and ending in the N½ NW¼ NE¼ 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				9	R. Rim	Traverses elevation line (4300 ft) starting in the S½ SW¼ and NW¼ to the point where 4300 ft. elevation line intersects the north-south subdivision of NE¼ NW¼ and NW¼ NW¼ thence north along north-south subdivision line and ending in the NE corner of the NW¼ NW¼ on east-west section line between sections 3 and 10
	35	45	W. M.	3	L. Rim	Starting SE corner of the SW¼ SW¼ thence west along east-west section line between sections 3 and 10 to SW corner of the E½ W½ W½ thence north along subdivision line between the E½ W½ W½ and W½ W½ W½ 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 SW¼ SW¼ thence north to the northeast corner of the NW¼ NW¼ thence east on township line to the southeast corner of the SW¼ SW¼ sec. 35 T 31S R45 E
	34	45	W. M.	35	R. Rim	Starting at southeast corner of the SW¼ SW¼ thence north to the northeast corner of the NW¼ SW¼ thence west ending at the west quarter corner sec. 35
4 of 17				31	R. Rim	Starting on the east quarter corner of section 34 thence west to SW corner of SE¼ SE¼ NE¼ thence north to the NW corner SE¼ SE¼ NE¼ thence west to center of the SW¼ NE¼, thence north and ending at the NW corner of NE¼ NW¼ NE¼
					L. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ending in the N½ NW¼ NW¼
				27	R. Rim	Starting at the SW corner of the SE¼ SW¼ SE¼ thence north to identifiable rim in center of the NW¼ SE¼ then ending by traverse of identifiable rim to the N½ NW¼ NE¼
					L. Rim	Traverse identifiable rim starting and ending in the S½ SW¼ SW¼
				28	L. Rim	Traverse identifiable rim starting in the E½ SE¼ SE¼ 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	31	45	W.M.	22	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ thence to north-south subdivision line between the NE¼ SE¼ and the NW¼ SE¼ 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 S½ SE¼ SE¼ and ending in the N½ NE¼ NW¼
				15	R. Rim	Traverse identifiable rim starting in the S½ SE¼ SW¼ and ending in the W½ NW¼ SW¼
				16	R. Rim	Traverse identifiable rim starting in the E½ NE¼ SE¼ and ending in the N½ N½ NW¼
					L. Rim	Traverse identifiable rim starting in the S½ SE¼ SW¼ and ending in the W½ NW¼ SW¼
				17	L. Rim	Traverse identifiable rim starting in the E½ NE¼ SE¼ and ending in the N½ NW¼ NW¼
				18	L. Rim	Traverse identifiable rim starting and ending in the NE¼ NE¼
				9	R. Rim	Traverse identifiable rim starting and ending in the SW¼ SW¼

				9	R. Rim	Traverse identifiable rim starting in the E½ SE¼ and ending in the NE¼ NW¼
				7	L. Rim	Traverse identifiable rim starting in the S½ SE¼ SE¼ to the SW corner of the NW¼ NW¼ SE¼ thence north along subdivision line to identifiable rim then along rim ending in the N½ NE¼ NW¼
4 & 5 of 17	34	45	W. V	5	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending lot 4
				6	L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in lot 5
5 of 17	33	45	W. V	32	R. Rim	Traverses identifiable rim starting in the W½ SW¼ and ending in the W½ SW¼
5 & 6 of 17				31	R. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ending in the N½ NW¼ NE¼
					L. Rim	Traverses identifiable rim starting in the S½ SW¼ SW¼ and ending in lot 3
5 & 6 of 17				30	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ 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 N½ NE¼
				25	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ending in the W½ NW¼ NW¼
				24	R. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the N½ NW¼ NE¼
					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 E½ SE¼ SE¼ and ending in the N½ NE¼ NE¼
6 of 17	33	44	W.M.	13	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ ending in the N½ NE¼ NW¼
				14	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SE¼ and ending in the N½ NE¼ NW¼
				12	R. Rim	Traverse identifiable rim starting in the S½ SE¼ SW¼ 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 S½ SE¼ SW¼ and ending in the W½ NW¼ NW¼
				10	L. Rim	Traverse identifiable rim starting and ending in the NE¼ NE¼
				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 N½ NE¼
					L. Rim	Traverse identifiable rim starting in the S½ SE¼ SE¼ and ending in the W½ SW¼ NW¼
				4	L. Rim	Traverse identifiable rim starting in the E½ SE¼ NE¼ and ending in N½ lot 4 except the crops to elevation line (4400 ft) in bottom of Skull Creek.
6 of 17	32	44	W. V	34	R. Rim	Traverses identifiable rim starting in the south quarter corner of section 34 and ending in the W½ SW¼ SW¼
				33	R. Rim	Traverse identifiable rim starting in the E½ SE¼ SE¼ and ending in the W½ NW¼ NW¼
					L. Rim	Traverse identifiable rim starting and ending in the W½ SW¼ SW¼
				32	R. Rim	Traverse identifiable rim starting and ending in the N½ NE¼
					L. Rim	Traverse identifiable rim starting in the E½ SE¼ SE¼ and ending in the W½ NW¼ NW¼
				31	L. Rim	Traverse identifiable rim starting and ending in the NE¼ NE¼
				29	R. Rim	Traverse identifiable rim starting at the south quarter corner of section 29 and ending at the northwest corner NW¼ SW¼ NW¼
				30	R. Rim	Starting at the northeast corner of NE¼ SE¼ NE¼ running west on subdivision line between N½ S½ and S½ NE¼ across Soldier Creek to identifiable rim and traverses to end in lot 7
					L. Rim	Traverse identifiable rim starting and ending in S½ S½
5,7,8 & 9 of 17	32	44	W. M.	19	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in lots 2 and S17
	32	43	W. V.	24	R. Rim	Traverses identifiable rim through N½ of section 24
					L. Rim	Traverses identifiable rim starting and ending in the S½ of section 24

				23	R. Rim	Traverses identifiable rim starting and ending in the N½ of section 23
					L. Rim	Traverses identifiable rim starting and ending in the S½ of section 23
				26	L. Rim	Traverses identifiable rim starting and ending in the N½ of section 26
				22	R. Rim	Traverses identifiable rim starting and ending in the NE¼
					L. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the W½ NW¼
				15	R. Rim	Traverses identifiable rim starting in the S½ SE¼ and ending in the W½ SW¼ NW¼
9 of 17				16	R. Rim	Traverses identifiable rim starting and ending in the N½
					L. Rim	Traverses identifiable rim starting and ending in the S½
9 of 17	32	43	W. M.	17	R. Rim	Traverse the identifiable rim starting and ending in the N½
					L. Rim	Traverses identifiable rim starting and ending in the S½
				18	L. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ 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 W½ NW¼ SW¼
					L. Rim	Traverses identifiable rim starting and ending S½ SW¼
8 & 10 of 17	32	12	W. M.	12	R. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ending in the N½ NW¼ NW¼
					L. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the W½ SW¼ NW¼
10 of 17				11	R. Rim	Traverses identifiable rim starting and ending NE¼ NE¼ and starts in the N½ NE¼ NE¼ and ends in the N½ NW¼ NE¼
					L. Rim	Traverses identifiable rim starting in the E½ SE¼ NE¼ and ending in the N½ NW¼ NW¼
10 of 17	32	42	W. M.	2	R. Rim	Traverses identifiable rim starting and ending S½ SE¼ SE¼ and starts in S½ SW¼ SE¼ and ends in the W½ NW¼ SW¼
					L. Rim	Traverses identifiable rim starting and ending in the SW¼ SW¼
				3	R. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ending in the S½ SW¼ SW¼ and starts and ends in SW¼ SW¼ SW¼
					L. Rim	Traverses identifiable rim starting and ending in the S½ SE¼
				10	R. Rim	Traverses identifiable rim starting and ending in the N½ NW¼ NW¼
					L. Rim	Traverses identifiable rim starting at the north quarter corner of section 10 to the southeast corner of the SE¼ NE¼ NW¼ thence west along subdivision line and ending at the southwest corner of the SW¼ NW¼ NW¼
				9	L. Rim	Traverses identifiable rim starting in the southeast corner of the SE¼ NE¼ NE¼ and ending in the N½ NW¼ NW¼
				4	R. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the W½ SW¼ NW¼
					L. Rim	Traverses identifiable rim starting and ending in the S½ SW¼ SW¼
10 of 17	32	42	W. M.	5	R. Rim	Traverses identifiable rim starting in the E½ SE¼ NE¼ and ending in the W½ NW¼ SW¼
					L. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the N½ NW¼ SW¼
				6	R. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ending in lot 12
					L. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending at southwest corner of the SW¼ SE¼ 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 S½ SW¼ 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 S½ NE¼ NE¼ and ending in the N½ NW¼ NE¼
					L. Rim	Traverses identifiable rim starting in the S½ NW¼ NW¼ and ending in the N½ NE¼ NW¼
				4	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ending in the N½ lot 2
					L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in the N½ lot 3
	30	41	W. M.	33	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ending in W½ SW¼ NW¼
					L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in the W½ NW¼ SW¼
				32	L. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ending on south boundary of NW¼ NW¼ SE¼ thence west to the southwest corner of the NW¼ NW¼ SE¼ thence north to center of section 32 thence west to identifiable rim on south boundary of SE¼ SW¼ NW¼ and to the west boundary of NW¼ SW¼ NW¼ thence north ending at section corner common to section 29, 30, 31 and 32.
					R. Rim	Traverses identifiable rim starting and ending in the NE¼
				29	R. Rim	Traverses identifiable rim starting and ending in the SE¼
					L. Rim	Starting at common section to sections 29, 30, 31, and 32 north to identifiable rim on west boundary located in the NW¼ SW¼ SW¼ thence along rim and ending in the E½ SE¼ NE¼
12 of 17	30	41	W.M	28	R. Rim	Traverses identifiable rim starting in the W½ NW¼ SW¼ and ending in the N½ NE¼ NW¼
					L. Rim	Traverses identifiable rim starting and ending in the W½ NW¼
				21	R. Rim	Traverses identifiable rim starting in the E½ SE¼ SW¼ and ending in the N½ NE¼ NW¼
					L. Rim	Traverses identifiable rim starting and ending in the W½ SW¼ SW¼ and starting and ending in the NW¼ NW¼
				20	L. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the E½ SE¼ NE¼
				16	R. Rim	Traverses identifiable rim starting in the E½ SE¼ SW¼ and ending in the W½ SW¼ NW¼
					L. Rim	Traverses identifiable rim starting and ending in the W½ SW¼
				17	R. Rim	Traverses identifiable rim starting in the E½ SE¼ NE¼ and ending in the N½ NE¼ NW¼
					L. Rim	Traverses identifiable rim starting in the E½ NE¼ SE¼ and ending in the N½ NW¼ NW¼
				8	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in the N½ NE¼ NE¼
					L. Rim	Traverses identifiable rim starting and ending in the SW¼ SW¼
12 of 17	30	41	W. M.	7	L. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the N½ NE¼ NE¼
				6	L. Rim	Traverses identifiable rim starting and ending in the SE¼ SE¼
				5	R. Rim	Traverses identifiable rim starting and ending in the SE¼ SE¼
					L. Rim	Traverses identifiable rim starting in the W½ SW¼ SW¼ and ending in lot 2
				4	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SW¼ and ending in lot 4
	29	41	W. M.	33	R. Rim	Traverses identifiable rim starting and ending in the SW¼ SW¼
				32	R. Rim	Traverses identifiable rim starting in the E½ SE¼ SE¼ and ending in the W½ SW¼ NW¼
					L. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ending in the W½ NW¼ SW¼
12 & 13 of 17				31	R. Rim	Traverses identifiable rim starting in the E½SE¼ NE¼ and ending in the N½ NE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the SE¼ NE¼ SE¼ thence to north center of SE¼ NE¼ SE¼ thence west to southwest corner of the NW¼ NW¼ SE¼ thence north to northwest corner of NW¼ SW¼ NE¼ thence along identifiable rim ending in the N½ NE¼ NW¼

13 of 17	29	41	W. M.	30	R. Rim	Traverses identifiable rim starting and ending in the SE¼ SE¼
					L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in the E½ NE¼ SE¼
				29	R. Rim	Traverses identifiable rim starting in the W½ SW¼ SW¼ and ending in the E½ SE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the W½ NW¼ SW¼ and ending in the N½ NW¼ NE¼
				28	R. Rim	Traverses identifiable rim starting and ending NW¼
				20	L. Rim	Traverses identifiable rim starting and ending in the SE¼
				21	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SW¼ and ending at east quarter corner and starts E½ SE¼ NE¼ and ends on the north boundary of the NW¼ NE¼ NE¼, thence west to the northwest corner of the NW¼ NE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the W½ NW¼ SW¼ and ending in the N½ NE¼ NW¼
				22	R. Rim	Starts at west quarter corner and ends on the west boundary of the NW¼ SW¼ NW¼
				16	R. Rim	Starts at the southwest corner of SE¼ SE¼, north to northwest corner of the NE¼ NE¼ thence east ending at section corner common to sections 9, 10, 15, and 16
					L. Rim	Traverses identifiable rim starting and ending in the W½
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 S½ SE¼ SW¼ and ending at the northwest corner of the NE¼ NE¼
				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 NW¼ NW¼ SW¼ 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 SW¼ SE¼ and ending on the west boundary line of NW¼ NW¼ SW¼ at 3400 ft. elevation thence north on section line to elevation line 3500 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 NE¼ NW¼
				34	R. Rim	Starting at the section corner between section 3 and 4 at 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 NE¼ SW¼ thence west to the southwest corner of SW¼ NW¼ SW¼ thence north along section line between sections 35 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 SW¼ SE¼ NE¼ thence north ending at the northwest corner of the NW¼ NE¼ NE¼
				29	L. Rim	Starting at the southeast corner of the SE¼ SW¼ SW¼ thence north to the northwest corner of the NW¼ NE¼ SW¼ thence east to the northeast corner

						of the NE¼ NE¼ SW¼ where it intersects the identifiable rim and traverses to the north boundary line of the NW¼ NE¼ NE¼ 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 SW¼ SE¼ SE¼ to the north boundary line of the NW¼ NE¼ SE¼ SE¼ 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 SE¼ SW¼ SW¼ and intersects 3400 ft elevation line and traverses elevation line and ending on the north boundary of the N½ NW¼ NE¼
14 of 17				22	R. Rim	Starting at the west quarter corner of section 22 east along division line to southeast corner of the SE¼ SW¼ NW¼ thence north along identifiable rim ending at the northeast corner of the NE¼ NW¼ NW¼
				15	L. Rim	Traverses elevation line 3500 ft starting in the S½ SW¼ SE¼ and ending E½ NE¼ SE¼
				15	R. Rim	Traverses identifiable rim starting at the southeast corner of the SE¼ SW¼ SW¼ and ending at the E½ NE¼ SE¼
					L. Rim	Traverses elevation line 3300 ft starting in the W½ NW¼ SW¼ and ending at the E½ SE¼ NE¼ thence north along section line and ending in the northeast corner of the NE¼ SE¼ NE¼
				14	R. Rim	Traverses identifiable rim starting at the W½ NW¼ SW¼ and ending in the E½ NE¼ SE¼ and starting and ending in the E½ NE¼
					L. Rim	Traverses elevation line 4100 ft starting at the northwest corner of the NW¼ SW¼ NW¼ and ending at the north boundary line of the N½ NE¼ NW¼
				13	R. Rim	Traverses identifiable rim starting at the NW¼ NW¼ SW¼ and ending in the SW¼ SW¼ NW¼
				11	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SE¼ and ending in the E½ SE¼ NE¼
					L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in the N½ NE¼ NW¼
14 of 17	29	41	W.M.	12	R. Rim	Traverses identifiable rim starting and ending in the W½ NW¼
				2	L. Rim	Traverses identifiable rim starting in the S½ SE¼ SW¼ and ending in lot 2
				1	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SW¼ and ending in lot 3
	27	41	W. M.	36	R. Rim	Traverses identifiable rim starting in the S½ SW¼ SW¼ and ending in the E½ SE¼ NE¼
				35	L. Rim	Traverses identifiable rim starting in the S½ SW¼ SE¼ and ending in the N½ NE¼ NE¼
				26	L. Rim	Traverses identifiable rim starting and ending in the SE¼ SE¼ SE¼
				25	R. Rim	Traverses identifiable rim starting in the S½ SE¼ SE¼ and ending in the E½ SE¼ NE¼
					L. Rim	Traverses identifiable rim starting and ending in the SW¼ SW¼ and starting at the southwest corner of the SW¼ NW¼ SW¼ along north-south section line to the northwest corner of NW¼ SW¼ NW¼ thence east to the southeast corner of the SW¼ NE¼ NW¼ thence, north to section line at northwest corner of NE¼ NE¼ NW¼, thence east along section line and ending at east corner of NE¼ NW¼ NE¼
14 of 17	27	41	W. M.	24	R. Rim	Starting at the southwest corner of the SW¼ SE¼ SE¼ thence north to northwest corner of the NW¼ SE¼ SE¼ thence east ending at northeast corner of the NE¼ SE¼ SE¼
14 & 15 of 17	27	42	W.M.	18	L. Rim	Starting at the northwest corner of lot 4 thence along subdivision line east ending at the northeast corner of the NE¼ SE¼ SE¼
				35	R. Rim	Traverses identifiable rim starting in lot 2 and ending on the south boundary of the NE¼ SE¼ NW¼ thence east leaving rim at elevation line 3600 ft to a point at the northeast corner of the NW¼ NW¼ SE¼ 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 SW¼ SW¼ NE¼ thence east to northeast corner of the SE¼ SE¼ NE¼ 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 SW¼ NW¼ SE¼ thence east ending at the southeast corner of the SE¼ NE¼ SE¼
				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 NW¼ SW¼ NE¼ thence east ending at the northeast corner of the NE¼ SE¼ NE¼
15 of 17	27	42	W. M.	27	R. Rim	Starts at the southwest corner of the SW¼ NW¼ SW¼ thence east to the southeast corner of the SE¼ NE¼ SE¼ 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 NE¼ NW¼ NW¼ and ending in the N½ NW¼ NE¼ and starting and ending in the NE¼ NE¼
				23	R. Rim	Traverses identifiable rim starting and ending in the S½ SW¼ SW¼ and starting and ending SW SE¼
					L. Rim	Starts at the northwest corner of the NW¼ SW¼ NW¼ thence east along subdivision line east to the northeast corner of the NE¼ SE¼ NE¼ thence south along section line ending at the 3900 ft elevation line
				24	L. Rim	Starts in the W½ SW¼ NW¼ on the 3900 ft elevation line and ends on identifiable rim at the northeast corner of the NW¼ NE¼ SW¼ on the 3400 ft elevation line to identifiable rim in S½ SE¼ SW¼ starts and ends in the E½ SW¼ at 3400 ft elevation line
				25	L. Rim	Traverses identifiable rim at 3400 ft elevation starting and ending in the N½ N½
15 of 17	27	42	W. M.	25	R. Rim	Starts at the northwest corner of the NW¼ SW¼ NW¼ 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	42	W. M.	19	R. Rim	Starting 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 SE¼ NE¼ SE¼ 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 18 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 section 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 43 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 SE¼ SE¼ 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 21 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 SW¼ SE¼ 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 SW¼ SE¼ 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 9 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 SE¼ SE¼ of sec. 31 thence north to northwest corner of the SE¼ NE¼ of sec. 31 thence east to the northeast corner of the SE¼ NE¼ 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 SE¼ SW¼ thence north to the northwest corner of the east half of the NE¼ SW¼ thence east to the northeast corner of the east half NE¼ SW¼ thence north to the northeast corner of the NE¼ NW¼ 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 northeast corner of the SW¼ NW¼ SW¼ thence north to the northwest corner of the NE¼ SW¼ NE¼ thence east to the southeast corner of the SW¼ NE¼ NW¼ thence north to the northeast corner of the NW¼ NW¼ NW¼ ending on section line
17 of 17	26	43	W. M.	21	R. Rim	Starts at the southwest corner of the SE¼ SE¼ SW¼ thence north to the northwest corner of the NE¼ SE¼ SW¼ thence east to the northeast corner of NE¼ SE¼ SW¼ thence north to the northwest corner of NW¼ SE¼ thence east to the northeast corner of the NE¼ SE¼ thence north to the northeast corner of the NW¼ NE¼ ending on sec. line
					L. Rim	Starts at the southwest corner of the NW¼ NW¼ thence east to the southeast corner of the W½ NW¼ NW¼ thence north to the northeast corner of W½ NW¼ NW¼ thence east on sec line ending at the northeast corner of the NW¼ NW¼
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 SW¼ SE¼ thence north on subdivision line to northwest corner of the SE¼ NE¼ thence east ending at northeast corner of SE¼ NE¼
				16	R. Rim	Starts at the southwest corner of the SE¼ SE¼ thence north to the northwest corner of the SE¼ NE¼ thence east to the northeast corner SE¼ NE¼ 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 SW¼ SW¼ thence north to the northeast corner of the NW¼ NW¼ ending
				9	L. Rim	Starts at the southwest corner of the SE¼ SW¼ thence north to the northwest corner of the NE¼ SW¼ thence east to the southeast corner of the SW¼ NE¼ thence north to the northeast corner of the SW¼ NE¼ thence east and ending at the southeast corner of the NE¼ NE¼
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 NE¼ NE¼ ending

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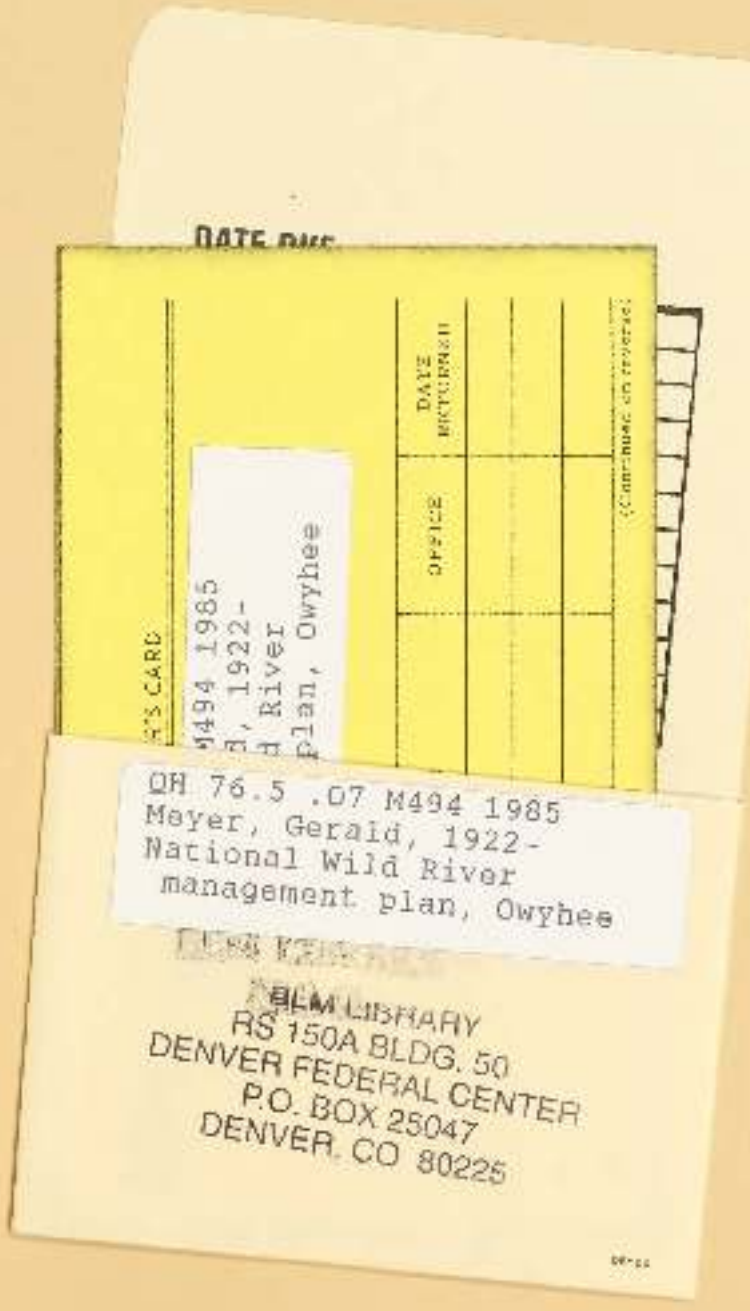

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