Owyhee Canyonlands Wilderness

Environmental Impact Statement

Final

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OREGON – IDAHO – NEVADA

1989

BLM MISSION STATEMENT

"The Bureau of Land Management is responsible for the balanced management of the Public Lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American People. Management is based upon the principles of multiple-use and sustained yield; a combination of uses that takes into account the long term needs of future generations for renewable and non-renewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values."

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
BOISE DISTRICT OFFICE
3948 DEVELOPMENT ROAD
BOISE, IDAHO 83705

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

September 1989

Dear Public Land User:

This Final Owyhee Canyonlands Wilderness Environmental Impact Statement (EIS) is presented for your information. It was prepared following consideration of public comments received on our draft document.

The Owyhee Canyonlands Wilderness EIS provides recommendations and analyses concerning the suitability and nonsuitability of wilderness designation on a total of 446,067 acres of WSA lands within eight WSAs and 4,205 acres of adjoining non-WSA lands along the Owyhee River and its tributaries in southwestern Idaho's Owyhee county, southeastern Oregon's Malheur county and northern Nevada's Elko county. The EIS was prepared in conformance with the BLM Wilderness Study Policy.

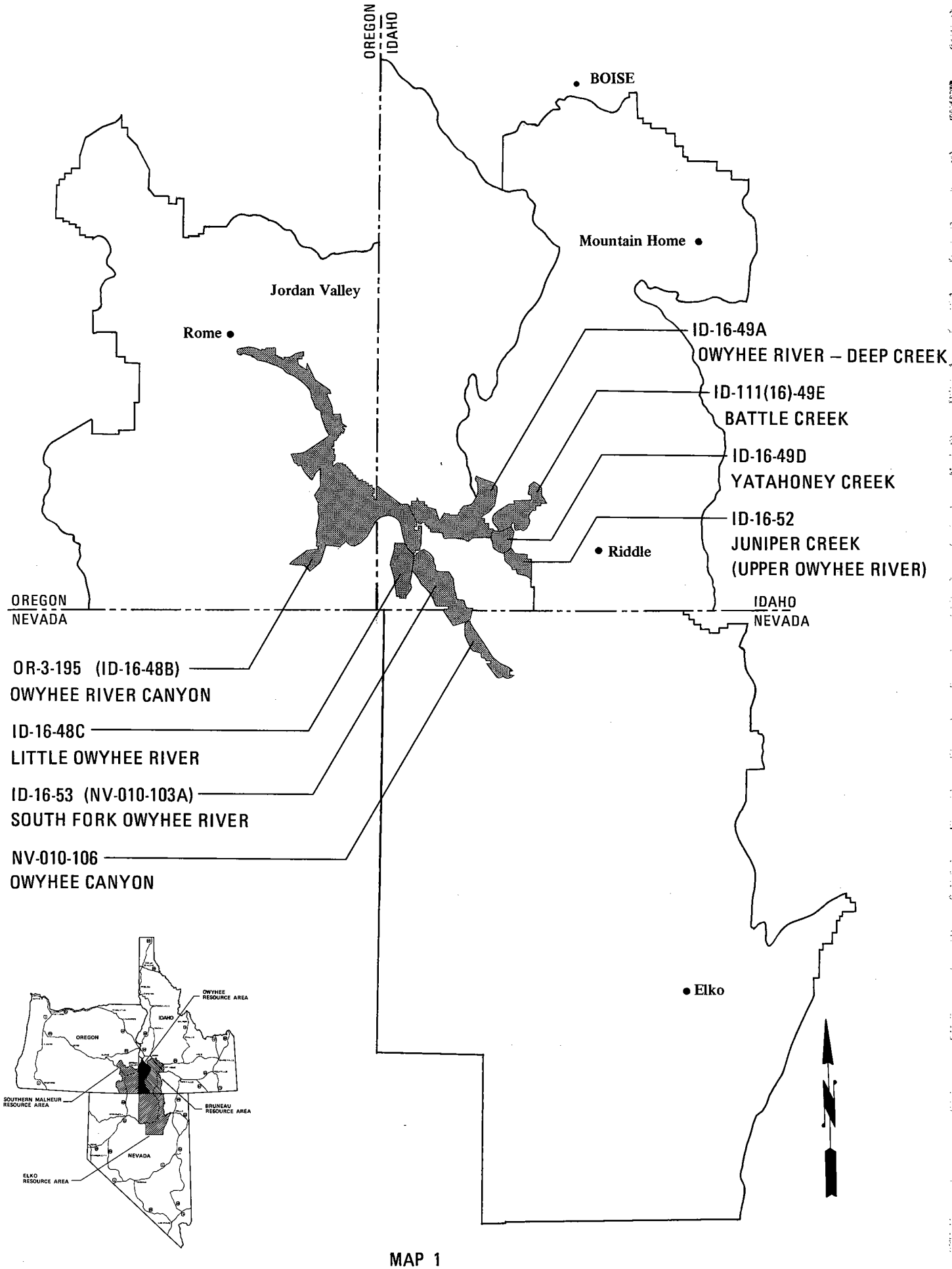
The Bureau of Land Management recommends that a total of 377,560 acres of public land (including 2,275 acres of adjoining non-WSA public land) are suitable for wilderness designation. It further recommends that 70,782 acres are nonsuitable for wilderness designation. This EIS analyzes the environmental consequences of these recommendations and alternatives.

The recommendations will be forwarded to the Secretary of the Interior for review and further recommendation to the President. The President will then make recommendations to the Congress of the United States. Congress will make the final decision on whether or not any of these areas are designated as wilderness.

Thank you for your continuing interest and assistance in our effort to manage the public lands.

Sincerely,

J. David Brunner
District Manager



MAP 1
GENERAL LOCATION MAP

OWYHEE CANYONLANDS WILDERNESS

FINAL

ENVIRONMENTAL IMPACT STATEMENT

Prepared By

Department of the Interior

Bureau of Land Management

Boise District Office

Idaho State Director

OWYHEE CANYONLANDS WILDERNESS EIS

Malheur County Oregon, Owyhee County Idaho and Elko County Nevada

( ) Draft (X) Final
( ) Administrative (X) Legislative

Responsible Agency: Dept. of Interior, Bureau of Land Management

Abstract: The Bureau of Land Management (BLM) proposed action is to recommend 377,560 acres of public land associated with eight wilderness study areas (WSAs) for wilderness designation and 70,782 acres for uses other than wilderness. The wilderness recommendation includes 2,275 acres of non-WSA public land. This document analyzes the environmental consequences of the proposed action and five alternatives ranging from no wilderness to all wilderness within the eight WSAs.

The eight WSAs and Proposed Action for each are:

WILDERNESS STUDY AREA	PROPOSED ACTION	
	SUITABLE	NONSUITABLE
WSA OR-3-195 (ID-16-48B), Owyhee River Canyon	185,740	38,660
WSA ID-16-48C, Little Owyhee River	8,460	16,140
WSA ID-16-49A, Owyhee River-Deep Creek	67,530[1]	4,250
WSA ID-16-49D, Yatahoney Creek	9,550	440
WSA ID-111-49E, Battle Creek	31,880[2]	80
WSA ID-16-52, Juniper Creek (Upper Owyhee River)	12,950	200
WSA ID-16-53 (NV-010-103A), South Fork Owyhee River	47,925[3]	2,662
WSA NV-010-106, Owyhee Canyon	13,525	8,350
TOTAL	377,560	70,782

[1] Includes 1,620 acres of public land outside the WSA boundary.
[2] Includes 420 acres of public land outside the WSA boundary.
[3] Includes 235 acres of public land outside the WSA boundary.

Comments Have Been Requested and Received From the Following:
See pages V-3 through V-7.

Date Draft Statement Made Available to EPA and the Public:
February 24, 1984.

For Further Information Contact:

District Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

SUMMARY

The Owyhee Canyonlands Wilderness EIS contains an environmental analysis of recommendations concerning the suitability of wilderness designation for eight wilderness study areas (WSAs) along the Owyhee River where the states of Oregon, Idaho, and Nevada join. The EIS was prepared in conformance with the BLM Wilderness Study Policy and the National Environmental Policy Act of 1969. The eight wilderness study areas addressed in this document are:

WILDERNESS STUDY AREA	TOTAL ACRES	ACRES		
		IDAHO	OREGON	NEVADA
OR-3-195 (ID-16-48B); Owyhee River Canyon	224,400	33,700	190,700	0
ID-16-48C; Little Owyhee River	24,600	24,600	0	0
ID-16-49A; Owyhee River-Deep Creek	70,160	70,160	0	0
ID-16-49D; Yatahoney Creek	9,990	9,990	0	0
ID-111(16)-49E; Battle Creek	31,540	31,540	0	0
ID-16-52; Juniper Creek (Upper Owyhee River)	13,150	13,150	0	0
ID-16-53 (NV-010-103A); South Fork Owyhee River	50,352	42,510	0	7,842
NV-010-106; Owyhee Canyon	21,875	0	0	21,875
TOTAL	446,067	225,650	190,700	29,717

The following issues have been identified for analysis in this EIS:

1. Impacts to wilderness values including naturalness, solitude, primitive and unconfined recreation and special features (bighorn sheep and cultural resources).
2. Impacts to native vegetation.
3. Impacts to wildlife populations.
4. Impacts to semi-primitive motorized recreation.
5. Impacts to livestock use.
6. Impacts to soil erosion.
7. Impacts to water quality.
8. Impacts to income and jobs.
9. Impacts to transmission line development in Nevada.

Six alternatives were developed based upon: 1) the issues of concern to the public and BLM managers, 2) the relative wilderness values of the WSAs, and 3) the degree of conflict between competing resource values. Suitable acreage recommendations include varying amounts of WSA lands (up to 446,067 acres) plus adjacent non-WSA lands included to enhance wilderness manageability. The acres recommended as suitable and nonsuitable in the alternatives are as follows:

WSA	ALTERNATIVE					
		No Action				
	Proposed Action	Alternative	Subalternative	Canyonlands Wilderness	Wildlife Wilderness	All Wilderness
OR-3-195 (ID-16-48B)	185,740	0	0	46,900	147,070	224,400
ID-16-48C	8,460	0	0	6,000	8,460	26,530
ID-16-49A	67,530	0	0	18,000	55,530	71,780
ID-16-49D	9,550	0	0	2,000	9,550	9,990
ID-111-49E	31,880	0	0	2,200	26,380	31,960
ID-16-52	12,950	0	0	3,200	9,930	13,150
ID-16-53 (NV-010-103A)	47,925	0	0	9,000	34,990	50,587
NV-010-106	13,525	0	0	1,600	0	21,875
TOTAL SUITABLE	377,560	0	0	88,900	291,910	450,272
TOTAL NONSUITABLE	70,782	446,067	446,067	357,167	155,257	0

SUMMARY OF ALTERNATIVES AND ENVIRONMENTAL CONSEQUENCES

PROPOSED ACTION

The area recommended suitable for wilderness designation encompasses 377,560 acres of public land (including 2,275 non-WSA acres) managed by BLM. An additional 14,380 acres of state and private lands are also recommended suitable for wilderness designation following acquisition (negotiated purchase or exchange). The area recommended nonsuitable for wilderness designation encompasses 70,782 acres of public land.

Naturalness in the suitable area would be improved overall on 288,660 acres due to grazing system adjustments, improved on 20,800 acres from prescribed burning, and improved along 106 miles of closed vehicle routes. Naturalness would be reduced on 3,800 acres for one year during oil and gas exploration, permanently reduced on 130 acres from new reservoirs and fences, and permanently lost on 515 acres from pipeline development. In the nonsuitable area, naturalness would be reduced on 21,680 acres for 20 years

from vegetative treatments, reduced on 9,500 acres for one year during oil and gas exploration, permanently reduced on 185 acres from new reservoirs and fences, and permanently lost on 10,245 acres from pipelines and powerlines.

Solitude opportunities in the suitable area would be increased along 106 miles of closed vehicle routes, reduced on 515 acres for 1 1/2 months during pipeline construction, and reduced on 3,800 acres for one year during oil and gas exploration. In the nonsuitable area, solitude opportunities would be reduced on 2,895 acres for 1 1/2 months during pipeline construction, reduced on 3,675 acres for 1 1/2 months during powerline construction, and reduced on 9,500 acres for one year during oil and gas exploration.

Primitive recreation opportunities in the suitable area would be enhanced along 106 miles of closed vehicle routes, permanently reduced on 515 acres from pipeline development, and reduced on 3,800 acres for one year during oil and gas exploration. In the nonsuitable area, primitive recreation opportunities would be permanently reduced on 2,895 acres from pipeline development, permanently reduced on 7,350 acres from powerline development, reduced on 21,680 acres for 20 years from drill seeding, and reduced on 9,500 acres for one year during oil and gas exploration.

Bighorn sheep populations would reach 900-1,200 animals in 20 years. Road closures near the canyon rim would reduce disturbance. Pipeline construction would cause disturbance for 1 1/2 months.

Cultural values would benefit from reduced vandalism due to closed vehicle routes. Livestock trampling damages would continue the same.

Native vegetation in good condition would be retained on 119,135 acres and 325,457 acres in poor/fair condition would be improved. Seedings would displace 3,750 acres and 45 acres would be lost to developments. Disturbance and recovery would occur on 56 acres from energy and mineral activities. Road closures would allow partial recovery along 50 miles and full recovery along 56 miles.

Wildlife population changes are projected over 20 years. In the suitable area, mule deer and pronghorn would increase 15% to 25% and sage grouse would increase 10% to 15%. In the nonsuitable area, mule deer and pronghorn would increase 5% and sage grouse would decrease 10%.

Semi-primitive recreation use is projected over 20 years in user days per year. Hunting would reach 2,400, backpacking would reach 235, and other activities (rockhounding, sightseeing and vehicle camping) would reach 1,800 for a total of 4,435 user days. Boating use would reach 11,000 user days. Public recreational motor vehicle use would be lost on 106 miles of closed vehicle routes. New vehicle routes in Nevada would be established from powerline development.

Livestock use in 20 years would increase 16% within affected allotments and increase 5% within the WSA boundaries. No increases would occur in the suitable area. New range developments include four reservoirs and three miles of fence in the suitable area and six reservoirs and six miles of fence in the nonsuitable area.

The broad based soil erosion rate would decrease 10% in the suitable area and would remain the same in the nonsuitable area.

Suspended sediment impacts to water quality would be reduced 5% in the suitable area and would remain the same in the nonsuitable area.

Local income would increase 58% and local employment would increase 97% over 20 years.

NO ACTION (NO WILDERNESS) ALTERNATIVE

No lands are recommended suitable for wilderness designation. The nonsuitable recommendation encompasses all 466,067 acres of public land within the eight WSAs. The existing 65 miles and 20,800 acres of the designated Owyhee National Wild River in Oregon would be expanded to include an additional 66 miles and 21,120 acres in Idaho for a total of 131 miles and 41,920 acres.

Naturalness would be reduced on 35,090 acres for 20 years from vegetative treatments, reduced on 13,300 acres for one year during oil and gas exploration, permanently reduced on 415 acres from new reservoirs and fences, permanently lost on 10,332 acres from pipelines and powerlines, and reduced on 10,000 acres for 20 years from mineral and geothermal exploration.

Solitude opportunities would be reduced on 2,982 acres for 1 1/2 months during pipeline construction, reduced on 3,675 acres for 1 1/2 months during powerline construction, reduced on 13,300 acres for one year during oil and gas exploration, and reduced on 10,000 acres for one year during mineral and geothermal exploration.

Primitive recreation opportunities would be permanently reduced on 2,982 acres from pipeline development, permanently reduced on 7,350 acres from powerline development, reduced on 35,090 acres for 20 years from drill seeding, reduced on 13,300 acres for one year during oil and gas exploration, and reduced on 10,000 acres for 20 years from mineral and geothermal exploration.

Bighorn sheep populations would reach 900-1,200 animals in 20 years. Disturbance would be increased near the canyon rim from continued vehicle access and increased visitor use. Disturbance would occur for one year during mineral and geothermal exploration at 25 sites.

Cultural values would show increased vandalism from continued vehicle access and increased visitor use. Livestock trampling damages would increase significantly.

Native vegetation in good condition would be retained on 119,095 acres and 320,122 acres in poor/fair condition would be improved. Seedings would displace 6,850 acres and 46 acres would be lost to developments. Disturbance and recovery would occur on 78 acres from energy and mineral activities.

Wildlife population changes are projected over 20 years. Mule deer, pronghorn and sage grouse would decrease 15%. Redband trout populations in Oregon could be reduced up to 50% from mineral exploration.

Semi-primitive recreation use is projected over 20 years in user days per year. Hunting would reach 2,900, backpacking would reach 280, and other activities (rockhounding, sightseeing, and vehicle camping) would reach 1,220 for a total of 4,400 user days. Boating use would reach 11,000 user days. New vehicle routes in Nevada would be established from powerline development. No public recreational motor vehicle use would be lost.

Livestock use in 20 years would increase 29% within affected allotments and increase 51% within the WSA boundaries. New range developments include 13 reservoirs and nine miles of fence.

The broad based soil erosion rate would increase 10% to 20%.

Suspended sediment impacts to water quality would increase 10% to 20%.

Local income would increase 75% and local employment would increase 104% over 20 years.

NO ACTION (NO WILDERNESS) SUBALTERNATIVE

No lands are recommended suitable for wilderness designation. The nonsuitable recommendation encompasses all 446,067 acres of public land within the eight WSAs. The existing 65 miles and 20,800 acres of the designated Owyhee National Wild River in Oregon would be expanded to include an additional 65 miles and 20,800 acres in Idaho for a total of 130 miles and 41,600 acres. This subalternative differs from the previous alternative in that a one mile river reach would be excluded from the wild river designation in order to accommodate expansion of the El Paso utility corridor.

Naturalness would be reduced on 35,090 acres for 20 years from vegetative treatments, reduced on 13,300 acres for one year during oil and gas exploration, permanently reduced on 415 acres from new reservoirs and fences, permanently lost on 10,760 acres from pipelines and powerlines, and reduced on 10,000 acres for 20 years from mineral and geothermal exploration.

Solitude opportunities would be reduced on 3,410 acres for 1 1/2 months during pipeline construction, reduced on 3,675 acres for 1 1/2 months during powerline construction, reduced on 13,300 acres for one year during oil and gas exploration, and reduced on 10,000 acres for one year during mineral and geothermal exploration.

Primitive recreation opportunities would be permanently reduced on 3,410 acres from pipeline development, permanently reduced on 7,350 acres from powerline development, reduced on 35,090 acres for 20 years from drill seeding, reduced on 13,300 acres for one year during oil and gas exploration, and reduced on 10,000 acres for 20 years from mineral and geothermal exploration.

Bighorn sheep populations would reach 900-1,200 animals in 20 years. Disturbance would be increased near the canyon rim from continued vehicle access and increased visitor use. Pipeline construction would cause disturbance for 1 1/2 months and disturbance would occur for one year during mineral and geothermal exploration at 25 sites.

Cultural values would show increased vandalism from continued vehicle access and increased visitor use. Livestock trampling damages would increase significantly.

Native vegetation in good condition would be retained on 119,095 acres and 320,122 acres in poor/fair condition would be improved. Seedings would displace 6,850 acres and 51 acres would be lost to developments. Disturbance and recovery would occur on 84 acres from energy and mineral activities.

Wildlife population changes are projected over 20 years. Mule deer, pronghorn, and sage grouse would decrease 15%. Redband trout populations in Oregon could be reduced up to 50% from mineral exploration.

Semi-primitive recreation use is projected over 20 years in user days per year. Hunting would reach 2,900, backpacking would reach 280, and other activities (rockhounding, sightseeing and vehicle camping) would reach 1,220 for a total of 4,400 user days. Boating use would reach 11,000 user days. New vehicle routes in Nevada would be established from powerline development. No public recreational motor vehicle use would be lost.

Livestock use in 20 years would increase 29% within affected allotments and increase 51% within the WSA boundaries. New range developments include 13 reservoirs and nine miles of fence.

The broad based soil erosion rate would increase 10% to 20%.

Suspended sediment impacts to water quality would increase 10% to 20%.

Local income would increase 75% and local employment would increase 104% over 20 years.

CANYONLANDS WILDERNESS ALTERNATIVE

The area recommended suitable encompasses 88,900 acres of public land. An additional 7,530 acres of state and private lands are also recommended suitable following acquisition. The area recommended nonsuitable encompasses 357,167 acres of public land.

Naturalness in the suitable area would be improved along six miles of closed vehicle routes. Naturalness would be permanently lost on 120 acres from pipeline development. In the nonsuitable area, naturalness would be reduced on 35,090 acres for 20 years from vegetative treatments, reduced on 13,300 acres for one year during oil and gas exploration, permanently reduced on 415 acres from new reservoirs and fences, permanently lost on 10,640 acres from pipelines and powerlines, and reduced on 7,800 acres for 20 years from mineral exploration.

Solitude opportunities in the suitable area would be increased along six miles of closed vehicle routes, and reduced on 120 acres for 1 1/2 months during pipeline construction. In the nonsuitable area, solitude opportunities would be reduced on 3,290 acres for 1 1/2 months during pipeline construction, reduced on 3,675 acres for 1 1/2 months during powerline construction, reduced on 13,300 acres for one year during oil and gas exploration, and reduced on 7,800 acres for one year during mineral exploration.

Primitive recreation opportunities in the suitable area would be enhanced along six miles of closed vehicle routes, and permanently reduced on 120 acres from pipeline development. In the nonsuitable area, primitive recreation opportunities would be permanently reduced on 3,290 acres from pipeline development, permanently reduced on 7,350 acres from powerline development, reduced on 35,090 acres for 20 years from drill seeding, reduced on 13,300 acres for one year during oil and gas exploration, and reduced on 7,800 acres for 20 years from mineral exploration.

Bighorn sheep populations would reach 900-1,200 animals in 20 years. Road closures near the canyon rim would reduce disturbance. Pipeline construction would cause disturbance for 1 1/2 months, and disturbance would occur for one year during mineral exploration 19 sites.

Cultural values would benefit from reduced vandalism due to closed vehicle routes. Livestock trampling damages would increase significantly.

Native vegetation in good condition would be retained on 119,095 acres and 320,122 acres in poor/fair condition would be improved. Seedings would displace 6,850 acres and 51 acres would be lost to developments. Disturbance and recovery would occur on 71 acres from energy and mineral activities. Road closures would allow full recovery along 6 miles.

Wildlife population changes are projected over 20 years. In the suitable area, mule deer, pronghorn, and sage grouse would remain the same. In the nonsuitable area, mule deer, pronghorn and sage grouse would decrease 10%. Redband trout populations in Oregon could be reduced up to 50% from mineral exploration.

Semi-primitive recreation use is projected over 20 years in user days per year. Hunting would reach 2,860, backpacking would reach 280, and other activities (rockhounding, sightseeing and vehicle camping) would reach 1,120 for a total of 4,260 user days. Boating use would reach 11,000 user days. Public recreational motor vehicle use would be lost on six miles of closed vehicle routes. New vehicle routes in Nevada would be established from powerline development.

Livestock use in 20 years would increase 29% within affected allotments and increase 42% within the WSA boundaries. No increases would occur in the suitable area. New range developments include 13 reservoirs and nine miles of fence in the nonsuitable area.

The broad based soil erosion rate would remain the same in the suitable area and would increase 10% to 20% in the nonsuitable area.

Suspended sediment impacts to water quality would remain the same in the suitable area and would increase 10% to 20% in the nonsuitable area.

Local income would increase 75% and local employment would increase 100% over 20 years.

WILDLIFE WILDERNESS ALTERNATIVE

The area recommended suitable encompasses 291,910 acres (including 1,100 non-WSA acres) of public land. An additional 12,440 acres of state and private lands are also recommended suitable following acquisition. The area recommended nonsuitable encompasses 155,257 acres of public land.

Naturalness in the suitable area would be improved overall on 203,010 acres due to grazing system adjustments, improved on 15,200 acres from prescribed burning, and improved along 76 miles of closed vehicle routes. Naturalness would be reduced on 3,800 acres for one year during oil and gas exploration, permanently reduced on 130 acres from new reservoirs and fences, and permanently lost on 195 acres from pipeline development. In the nonsuitable area, naturalness would be reduced on 34,690 acres for 20 years from vegetative treatments, reduced on 9,500 acres for one year during oil and gas exploration, permanently reduced on 185 acres from new reservoirs and fences, permanently lost on 10,565 acres from pipelines and powerlines, and reduced on 320 acres for 20 years from mineral exploration.

Solitude opportunities in the suitable area would be increased along 76 miles of closed vehicle routes, reduced on 195 acres for 1 1/2 months during pipeline construction, and reduced on 3,800 acres for one year during oil and gas exploration. In the nonsuitable area, solitude opportunities would be reduced on 3,215 acres for 1 1/2 months during pipeline construction, reduced on 3,675 acres for 1 1/2 months during powerline construction, reduced on 9,500 acres for one year during oil and gas exploration, and reduced on 320 acres for one year during mineral exploration.

Primitive recreation opportunities in the suitable area would be enhanced along 76 miles of closed vehicle routes, permanently reduced on 195 acres from pipeline development, and reduced on 3,800 acres for one year during oil and gas exploration. In the nonsuitable area, primitive recreation opportunities would be permanently reduced on 3,215 acres from pipeline development, permanently reduced on 7,350 acres from powerline development, reduced on 34,690 acres for 20 years from drill seeding, reduced on 13,300 acres for one year during oil and gas exploration, and reduced on 320 acres for 20 years from mineral exploration.

Bighorn sheep populations would reach 900-1,200 animals in 20 years. Road closures near the canyon rim would reduce disturbance. Pipeline construction would cause disturbance for 1 1/2 months, and disturbance would occur for one year during mineral exploration at 2 sites.

Cultural values would benefit from reduced vandalism due to closed vehicle routes. Livestock trampling damages would decrease slightly.

Native vegetation in good condition would be retained on 119,095 acres and 321,422 acres in poor/fair condition would be improved. Seedings would displace 6,650 acres and 45 acres would be lost to developments. Disturbance and recovery would occur on 58 acres from energy and mineral activities. Road closures would allow partial recovery along 35 miles and full recovery along 47 miles.

Wildlife population changes are projected over 20 years. In the suitable are, mule deer and pronghorn would increase 15% to 20% and sage grouse would increase 10% to 15%. In the nonsuitable area, mule deer and pronghorn would increase 15% and sage grouse would increase 10%.

Semi-primitive recreation use is projected over 20 years in user days per year. Hunting would reach 2,600, backpacking would reach 245, and other activities (rockhounding, sightseeing, and vehicle camping) would reach 1,800 for a total of 4,645 user days. Boating use would reach 11,000 user days. Public recreational motor vehicle use would be lost on 76 miles of closed vehicle routes. New vehicle routes in Nevada would be established from powerline development.

Livestock use in 20 years would increase 3% within affected allotments and decrease 1% within the WSA boundaries. No increases would occur in the suitable area. New range developments include four reservoirs and three miles of fence in the suitable area and six reservoirs and six miles of fence in the nonsuitable area.

The broad based soil erosion rate would decrease 5% to 10% in the suitable area and would decrease 5% to 10% in the nonsuitable area.

Suspended sediment impacts to water quality would be reduced 5% in the suitable area and would be reduced 5% in the nonsuitable area.

Local income would increase 45% and local employment would increase 94% over 20 years.

ALL WILDERNESS ALTERNATIVE

The area recommended suitable encompasses 450,272 acres (including 4,285 non-WSA acres) of public land. An additional 16,060 acres of state and private lands are also recommended suitable following acquisition. No WSA lands are recommended nonsuitable.

Naturalness would be improved overall on 316,372 acres due to grazing system adjustments, improved on 26,400 acres from prescribed burning, and improved along 153 miles of closed vehicle routes. Naturalness would be reduced on 190 acres from new reservoirs and fences.

Solitude opportunities would be increased along 153 miles of closed vehicle routes.

Primitive recreation opportunities would be enhanced along 153 miles of closed vehicle routes.

Bighorn sheep populations would reach 900-1,200 animals in 20 years. Road closures near the canyon rim would reduce disturbance.

Cultural values would benefit from reduced vandalism due to closed vehicle routes. Livestock trampling damages would decrease moderately.

Native vegetation in good condition would be retained on 119,095 acres, 331,177 acres in poor/fair condition would be improved, and 20 acres would be lost to developments. Road closures would allow partial recovery along 73 miles and full recovery along 79 miles.

Wildlife population changes are projected over 20 years. Mule deer and pronghorn would increase 25% to 30% and sage grouse would increase 20%.

Semi-primitive recreation use is projected over 20 years in user days per year. Hunting would reach 2,200, backpacking would reach 215, and other activities (rockhounding, sightseeing, and vehicle camping) would reach 1,800 for a total of 4,215 user days. Boating use would reach 11,000 user days. Public recreational motor vehicle use would be lost on 153 miles of closed vehicle routes. No new vehicle routes would be established.

Livestock use in 20 years would increase 1% within affected allotments and decrease 6% within the WSA boundaries. No increases would occur in the suitable area. New range developments include four reservoirs and nine miles of fence in the suitable area.

The broad based soil erosion rate would decrease 10%.

Suspended sediment impacts to water quality would be reduced 10%.

Local income would increase 40% and local employment would increase 82% over 20 years.

Rerouting the overhead high voltage transmission line in Nevada would increase construction costs by $2,000,000.

FINAL
OWYHEE CANYONLANDS WILDERNESS EIS

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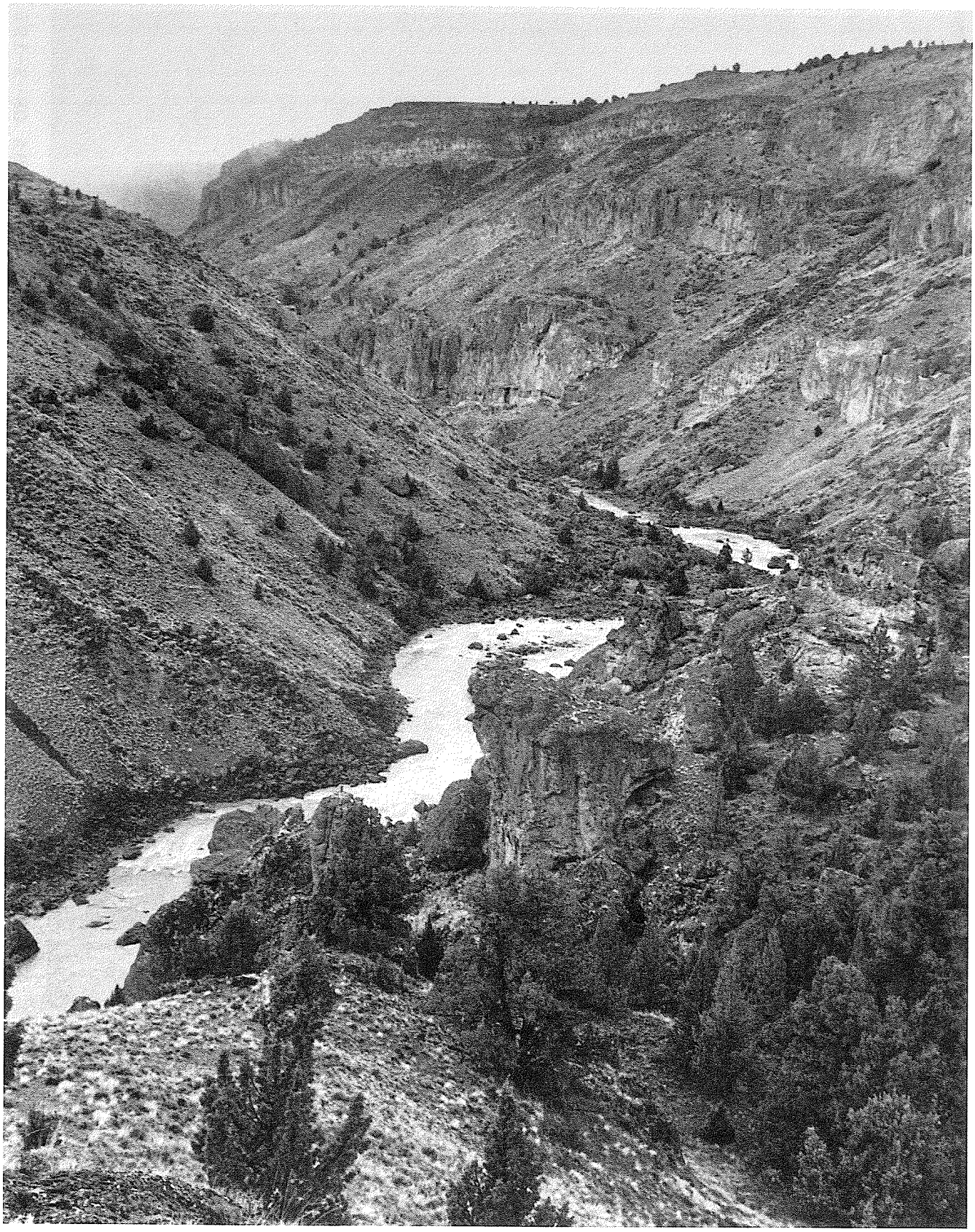


Photo by Ted Weigold

Owyhee River Canyon

WSA OR-3-195

CHAPTER I

Owyhee River Canyon

WSA OR-3-195

CHAPTER I
INTRODUCTION

DESCRIPTION

This EIS assess the environmental consequences of managing all or portions of eight wilderness study areas (WSAs) totalling 446,067 acres and 4,205 acres of adjoining non-WSA lands as wilderness or nonwilderness. The WSA are clustered along the high sagebrush desert plateau and canyonlands of the Owyhee River system where the three states of Oregon, Idaho and Nevada join (see Map 1). The WSAs contain 124 miles of the Owyhee River from Highway 95 in Oregon to the Duck Valley Indian Reservation in Idaho and 45 miles of the South Fork Owyhee River in Idaho and Nevada.

WSAs WITHIN THE OWYHEE
CANYONLANDS WILDERNESS EIS[1]

WSA	TOTAL ACRES	ACRES		
		IDAHO	OREGON	NEVADA
OR-3-195, (ID-16-48B); Owyhee River Canyon	224,400	33,700	190,700	0
ID-16-48C; Little Owyhee River	24,600	24,600	0	0
ID-16-49A; Owyhee River-Deep Creek	70,160	70,160	0	0
ID-16-49D; Yatahoney Creek	9,990	9,990	0	0
ID-111-49E; Battle Creek	31,540	31,540	0	0
ID-16-52; Juniper Creek (Upper Owyhee River)	13,150	13,150	0	0
ID-16-53, (NV-010-103A); South Fork Owyhee River	50,352	42,510	0	7,842
NV-010-106; Owyhee Canyon	21,875	0	0	21,875
TOTAL	446,067	225,650	190,700	29,717

[1] A total of 4,205 acres of adjoining non-WSA BLM lands are being considered with the WSA acreages shown. WSA lands are being studied under the authority of Section 603 of the Federal land Policy and Management Act (FLPMA) while non-WSA lands are being studied under the authority of Section 202 of FLPMA.

PURPOSE AND NEED

The purpose of the Proposed Action is to manage and preserve wilderness characteristics on 377,560 acres (including 2,275 acres of non-WSA lands) as part of the National Wilderness Preservation System and to manage for uses other than wilderness on the remaining 70,782 acres of WSA lands and 1,930 acres of non-WSA lands. There are few designated wilderness areas in the Intermountain Basin of the western United States and they are generally in the mountainous areas adjacent to the desert and semi-desert regions. The Proposed Action would provide a relatively large desert area with

opportunities for wilderness experiences not yet available in the National Wilderness Preservation System in this region.

The Federal Land Policy and Management Act of 1976 (FLPMA) directs BLM to manage the public lands and their resources under the principles of multiple use and sustained yield. Section 603 of FLPMA requires a wilderness review of BLM roadless areas of 5,000 or more acres and roadless islands. The BLM inventory process identified wilderness study areas which have the mandatory wilderness characteristics of size, naturalness, and outstanding opportunities for solitude and/or primitive recreation. Non-WSA lands associated with the Owyhee Canyonlands WSAs are considered in this EIS under the authority of Section 202 of FLPMA. Suitable or nonsuitable wilderness recommendations for each WSA will be presented to the President by the Secretary of the Interior. The President will then make recommendations to Congress. Areas can be designated wilderness only by an act of Congress. Designated wilderness will be managed in accordance with the Wilderness Act of 1964.

SCOPING AND ENVIRONMENTAL ISSUE IDENTIFICATION

In December 1982, over 1,800 individuals, organizations, and agencies were contacted to determine their concerns with the Owyhee Canyonlands Wilderness Study. As a result, 211 comments were received prior to the preparation of the draft EIS. A total of 517 written and oral comments were received during the review period on the draft EIS in 1984. Additional comments were submitted by agencies in 1985. The scoping process identified the environmental issues listed below that were selected for detailed analysis in this final EIS.

ENVIRONMENTAL ISSUES SELECTED FOR ANALYSIS

Impacts to Wilderness Values

The wilderness values of naturalness, opportunities for solitude, opportunities for primitive recreation, and special features (bighorn sheep and cultural resources) within the WSAs could benefit from wilderness designation. The same values may be adversely affected by uses and actions that would occur should the WSAs not be designated wilderness. The significance of beneficial or adverse impacts on wilderness values is an issue for analysis.

Impacts to the Condition and Amount of Native Vegetation

The Owyhee Canyonlands WSAs support a sagebrush-bunchgrass ecosystem where species composition and ecological condition was historically dependent on natural fires prior to livestock use. Livestock grazing practices and limited natural fire occurrence have resulted in a change in the amount and ecological condition of native vegetation. Wilderness designation or nondesignation could affect the type and amount of vegetative treatment undertaken to change the species composition of plant communities primarily

for the benefit of livestock grazing. The significance of beneficial or adverse impacts to the condition and amount of native vegetation is an issue for analysis.

Impacts to the Level of Selected Wildlife Populations

The Owyhee Canyonlands WSAs support a diversity of wildlife species which are dependent upon the relatively undisturbed habitats found there. Wilderness designation or nondesignation could affect the amount of habitat modifications which could occur. The degree of habitat modifications could affect species populations and distribution. The wildlife species of primary importance in the area and those that are selected for detailed analysis are mule deer, pronghorn antelope, sage grouse, and redband trout. The significance of beneficial or adverse impacts to these wildlife populations is an issue for analysis. California bighorn sheep are also found in the area and are addressed as a special feature of wilderness value.

Impacts to the Level of Semi-Primitive Motorized Recreation

The Owyhee Canyonlands WSAs are used for semi-primitive motorized recreation activities. Recreation use is primarily associated with hunting activities and to a lesser extent sightseeing and rock (gemstone) collecting. Wilderness designation would affect the continuation of motorized recreation access into the WSAs and could result in changes in the amount and type of recreation activities in the area. The significance of impacts to semi-primitive motorized recreation is an issue for analysis.

Impacts to the Level of Livestock Use

Grazing use is managed through grazing systems and rangeland developments including reservoirs, springs, fences, seedings and vegetative manipulation. Wilderness designation could impact livestock use levels by precluding potential range developments designed to increase livestock use or improve range condition and by restricting the level of livestock use allowed. The significance of impacts to the level of livestock grazing use is an issue for analysis.

Impacts to the Level of Soil Erosion

Wilderness designation or nondesignation could affect the level of soil erosion by changing the level of livestock use and the extent of vegetation treatment projects. Soil erosion could also be affected by mineral and energy related activities. The significance of impacts to the level of soil erosion is an issue for analysis.

Impacts to Water Quality

Wilderness designation or nondesignation could affect water quality by changing livestock use levels and the extent of vegetation treatment projects. Water quality could also be affected by mineral and energy related activities. The significance of impacts to water quality is an issue for analysis.

Impacts to Local Income and Jobs

The Owyhee Canyonlands WSAs provide income and jobs to the local communities of Oregon, Idaho and Nevada through livestock grazing use and recreation use. Wilderness designation could impact jobs and revenues which are dependent upon the level of livestock use. It could also impact jobs and revenues generated by different types and amounts of recreation use. The significance of impacts to local income and jobs from changes in livestock and recreation use is an issue for analysis.

Impacts to Overhead Transmission Line Development in Nevada

The Elko Resource Management Plan identifies five-mile wide planning corridors (for future use) to the south and to the east of WSA NV-010-106. These planning corridors, which run east-west and north-south beyond the boundaries of the WSA, allow for construction of overhead high-voltage electric transmission lines to accommodate future energy needs. For analytical purposes, scenarios were developed projecting construction of an overhead transmission line within each of these planning corridors in the vicinity of and through WSA NV-010-106 in Nevada. For analytical purposes it is projected that without wilderness designation, the east-west five-mile wide planning corridor would traverse and occupy the southern one-third of WSA NV-010-106 and would allow for overhead transmission line construction through this WSA. The north-south transmission line is not projected to continue in Idaho at this time. No other powerline construction is projected in this vicinity in the foreseeable future. The projected transmission lines would be constructed through WSA NV-010-106 in all alternatives except for the All Wilderness alternative. In the All Wilderness alternative, the transmission lines would be routed to the south and east around the WSA, but still within the planning corridors. Construction of these transmission lines through Nevada WSA NV-010-106, which would occur under all alternatives except the All Wilderness Alternative, are identified as actions which would affect resource values, including wilderness values, and are analyzed as such in those alternatives. In the All Wilderness Alternative, the transmission lines would be routed around the WSA in order to accomodate possible future energy transmission needs. The impact that routing these transmission lines around WSA NV-010-106 in Nevada would have on the utility industry is an issue selected for analysis. This issue is only analyzed in detail in the All Wilderness Alternative since the transmission lines would be routed through the WSA in all other alternatives with no impact on the utility industry.

ISSUES CONSIDERED BUT NOT SELECTED FOR ANALYSIS

Additional issues were identified during the scoping process but were not selected for detailed analysis in this final EIS. The following issues were considered but not analyzed for the reasons stated:

Impacts on Overhead Transmission Line Development: The electric utility industry expressed concern with restricting utility development (specifically high-voltage electric transmission lines) along the El Paso gas pipeline in

Idaho to underground placement only. They further requested that a utility corridor be designated to enable future construction of overhead transmission lines through the EIS study area. To date, the utility industry has not identified specific routes or specific proposals for overhead transmission lines through the EIS area. Land use plans, specifically the Bruneau and Owyhee Management Framework Plans in Idaho, restrict future utilities along the El Paso gas pipeline through and in the vicinity of the WSAs in Idaho to underground placement only. These land use plans do not designate corridors for overhead transmission lines in this vicinity. Because the land use plans do not provide for overhead transmission lines through the Idaho WSAs, the issue of constructing overhead transmission lines in Idaho is not dependent on wilderness designation and, therefore, has not been selected for detailed analysis.

The Elko Resource Management Plan in Nevada designated a utility corridor along the El Paso gas pipeline in Nevada through WSA NV-010-103A that allows for above ground placement, but specific proposals have not been identified or projected. The projected route for future overhead utilities in this area of Nevada is within the planning corridors to the south and east of this WSA. This projection is based on the Elko land use plan, anticipated future energy needs and probable environmental impacts that would occur on resource values other than wilderness. Because future overhead transmission lines in this area of Nevada are not projected through WSA NV-010-103A, and future energy needs would be accommodated by projected construction to the south and east, the issue of constructing overhead transmission lines through WSA NV-010-103A has not been selected for detailed analysis.

Economic Impact on Livestock Operations: Concerns were raised that livestock operators could be required to modify their operations within designated wilderness areas in a manner that would have significant adverse economic impacts on their business. This issue was considered but dropped from detailed analysis because the BLM's wilderness management policy provides for the continued use of wilderness areas for livestock operations. Although the management practices of livestock operators in designated wilderness would be more closely regulated, they would generally continue as they did prior to wilderness designation subject to reasonable controls.

Impact to Upstream Water Rights: Concern has been expressed on what impacts wilderness designation along the Owyhee River would have on upstream water rights in the Owyhee River watershed. Valid existing water rights would not be affected by wilderness designation. There is currently sufficient water flow in the Owyhee River to maintain wilderness values and minimum flows to protect these wilderness values are not recommended as part of the wilderness recommendation. Since minimum flows in the Owhyee River, which could affect future or potential upstream water rights, are not being recommended as part of the wilderness recommendation, future or potential water rights also would not be affected by wilderness designation. This issue was, therefore, dropped from detailed analysis.

Impacts to State and Private Inholdings: Concern was expressed on what impact wilderness designation would have on state and private inholdings; specifically use, access, and condemnation. Wilderness designation would

not mandate land use changes on non-federal inholdings. Reasonable access to the inholdings would also be allowed under a wilderness designation. It is the intention of BLM to pursue acquisition of inholdings within designated wilderness areas. This action would be voluntary for the landowner. Since wilderness designation would not restrict use or prohibit access, and acquisition would be voluntary for the landowner, this issue was dropped from detailed analysis.

Impacts to the Level of Aquatic Invertebrate Populations: Changes in aquatic invertebrate population levels as a result of management actions taken in areas with and without wilderness designation was identified as a concern. Aquatic invertebrates in the Owyhee River system are affected primarily by siltation from grazing and agricultural activities outside the WSAs and beyond the scope of this EIS. We have recognized the need to assess impacts in the aquatic environment and have selected redband trout as a representative species and the primary species of concern in the aquatic environment for this purpose. By analyzing impacts on redband trout, we feel that we are indirectly addressing aquatic invertebrate population levels. The analysis of redband trout is included in the issue section titled "Impacts to the Level of Selected Wildlife Species".

Impacts on Dam Development: There are three potential dam sites identified for the East Fork Owyhee River: Skull Creek, Duck Valley and the Juniper Creek Reservoir sites. The Juniper Creek Reservoir site is located within WSA ID-16-49D and if constructed would flood canyons in two WSAs. The other two sites lie upstream of the WSAs on the East Fork Owyhee River within the Duck Valley Indian Reservation; the Duck Valley site in Idaho and the Skull Creek site in Nevada. No sites have been identified on the South Fork Owyhee River. Because of the Owyhee National Wild River designation in Oregon, dam proposals can no longer be considered on the river in that state. The three potential dam sites have undergone a preliminary environmental review by the U.S. Fish and Wildlife Service and a preliminary engineering feasibility study by the Army Corps of Engineers. Based on these preliminary studies, it is the conclusion of the Corps of Engineers and BLM that dam construction is not feasible because of economic considerations and environmental constraints. Therefore, none of these potential dam sites are addressed in this final Wilderness EIS.

Impacts to Mineral and Energy Development: Mineral and energy resources were evaluated within the WSAs by government agencies and the private sector. The information generated indicates that there is generally a low to moderate favorability or potential for the occurrence of mineral and energy (oil and gas and geothermal) resources. There is also a low level of mineral and energy related interest and activity within the area. Based on the best available information, we project that limited mineral and energy exploration will occur as described under the various alternatives. We further project that there will be no mineral or energy development following exploration. Since no development is projected, there would be no impacts on mineral or energy resource development from wilderness designation. Consequently, this issue is not addressed further. Mineral and energy exploration activities would impact other resources and are addressed in this context throughout the document.

Impacts to the Level of Wildlife Populations Not Selected for Analysis: Comments suggested that the wildlife issue should be expanded to include additional wildlife species not identified in the draft EIS and that the impact analysis should be more detailed. The impact analysis in this final EIS responds to these comments and provides greater detail. The wildlife species selected for analysis are California bighorn sheep, mule deer, pronghorn antelope, sage grouse and redband trout. Analysis is focused on these key species for the following reasons: the species selected for analysis generally have the highest level of public interest, including agency interest, and are specifically managed through habitat modification and State regulations. The selected species are also the most likely species to be measurably affected by management actions. The amount and reliability of information concerning these species is greater than for other species as is the confidence level for estimating impacts. Preliminary analysis indicated that although other important wildlife species may change over time, the changes are either temporary or independent of wilderness designation. We feel that the information concerning the wildlife species selected for analysis is sufficient to make an informed wilderness recommendation.

FORMULATION OF ALTERNATIVES

Alternatives presented in the final EIS have larger wilderness area recommendations than those presented in the draft EIS as a result of the addition of Oregon split-estate lands as affected by the U.S. Supreme Court decision of April 18, 1985, in Sierra Club vs. Watt. Oregon split-estate lands are federally owned lands where mineral rights are held in reserve by the State of Oregon. A decision by the Secretary of the Interior (December 30, 1982) had eliminated federal lands from WSA OR-3-195 which have mineral rights held by the State of Oregon. These lands were not identified as part of the WSA in the draft Owyhee Canyonlands Wilderness EIS. The U.S. District Court for the Eastern District of California issued a decision on April 18, 1985, in Sierra Club vs. Watt, which restored split-estate lands to wilderness study status under Section 603 of FLPMA.

ALTERNATIVES SELECTED FOR ANALYSIS

The six alternatives selected for analysis in this final EIS include the Proposed Action (partial wilderness), the No Action (No Wilderness) Alternative which includes the 66-mile wild river recommendation previously submitted to Congress, the No Action (No Wilderness) Subalternative which addresses a 65-mile wild river designation, the Canyonlands and Wildlife alternatives (both partial wilderness), and the All Wilderness Alternative.

Proposed Action - The Proposed Action optimizes the wilderness resource values found in the WSAs. The alternative makes a suitable wilderness recommendation for portions of each of the eight WSAs (375,285 acres) plus an additional 2,275 acres of public land outside of the WSAs. It recommends 70,782 acres nonsuitable for wilderness based upon an evaluation of wilderness values in relation to the management needs of other resources

uses. The 2,275 acres of non-WSA public land are included in the wilderness recommendation to improve the overall management configuration of the wilderness complex. WSA specific wilderness recommendations under the Proposed Action are shown below.

WILDERNESS RECOMMENDATIONS UNDER THE PROPOSED ACTION

WSA NUMBER AND NAME	BLM ACREAGE	
	SUITABLE	NONSUITABLE
WSA OR-3-195 (ID-16-48B), Owyhee River Canyon	185,740	38,660
WSA ID-16-48C, Little Owyhee River	8,460	16,140
WSA ID-16-49A, Owyhee River-Deep Creek	67,530[1]	3,440
WSA ID-16-49D, Yatahoney Creek	9,550	440
WSA ID-111-49E, Battle Creek	31,880[2]	80
WSA ID-16-52, Juniper Creek (Upper Owyhee River)	12,950	200
WSA ID-16-53 (NV-010-103A), South Fork Owyhee River	47,925[3]	2,662
WSA NV-010-106, Owyhee Canyon	13,525	8,350
TOTAL	377,560	70,782

[1] Includes 1,620 acres of public land outside the WSA boundary.
[2] Includes 420 acres of public land outside the WSA boundary.
[3] Includes 235 acres of public land outside the WSA boundary.

No Action (No Wilderness) Alternative and No Action (No Wilderness) Subalternative - The No Action (No Wilderness) Alternative recommends each of the WSAs as nonsuitable for wilderness designation and projects an expansion of the Owyhee National Wild River designation (Wild and Scenic Rivers Act of 1968) to protect the wilderness character of 65 miles of the Owyhee River and East Fork Owyhee River canyons within the Idaho WSAs plus one additional non-WSA mile. This alternative is identical to the wild river proposal previously recommended to Congress by the President. The South Fork Owyhee River and the plateau of much of the WSAs would be managed under existing BLM administrative designations. The No Action (No Wilderness) Subalternative, projects a wild river designation expansion to include only 65 miles within the Idaho WSAs.

Canyonlands Wilderness Alternative - The Canyonlands Wilderness Alternative was developed to reduce conflicts associated with the use of motorized vehicles for recreation, to allow exploration for mineral and energy resources and to optimize land treatments and structural rangeland developments for livestock grazing. It also addresses a perception held by some that wilderness characteristics worthy of protection lie only within the canyons. The alternative recommends the canyonlands area of each WSA as suitable for wilderness (88,900 acres) except for the southern portion of WSA NV-010-106.

Wildlife Wilderness Alternative - The Wildlife (Bighorn Sheep) Wilderness Alternative was developed to reduce conflicts between wilderness management and the use of WSA lands for vegetation treatments and other rangeland developments and exploration for energy and mineral resources. It also addresses public concerns over the long-term protection of habitat for expanding bighorn sheep populations and other wildlife species. The alternative recommends portions of seven WSAs as suitable for wilderness designation (291,910 acres) plus 1,100 acres of additional public lands outside of the WSAs.

All Wilderness Alternative - The All Wilderness Alternative recommends wilderness designation for the entire acreage of the eight WSAs (446,067 acres) plus 4,205 acres of additional public land outside of the WSAs. The 4,205 acres of non-WSA lands include canyon or plateau lands lying between the established WSA boundaries and roads which formed the boundaries of wilderness inventory units. The additions are included, in light of the ongoing federal-state (Idaho) land exchange program, to reduce boundary configuration problems due to land ownership patterns and to align the wilderness area boundary along topographic features.

In addition to the public lands previously described, all the alternatives presented in this EIS consider the need for and the effect of acquisition of non-federal lands to enhance wilderness management or other resource management opportunities.

DEVELOPMENT OF THE PROPOSED ACTION

Recommendations concerning the suitability or nonsuitability of WSAs for wilderness designation were developed through BLM's planning system (43 CFR part 1600). The BLM's Wilderness Study Policy (published February 3, 1982, in the Federal Register) supplements the planning regulations by providing the specific factors to be considered during the planning sequence in developing suitability recommendations. After the WSAs were identified in the wilderness inventory, wilderness recommendations were included in management framework plans (MFPs) prepared in the Vale, Oregon and Boise, Idaho Districts The wilderness recommendations contained in the Vale District Southern Malheur and the Boise District Owyhee and Bruneau Resource Area MFPs constituted the Proposed Action contained in the draft Owyhee Canyonlands Wilderness EIS released in February, 1984. The Elko (Nevada) Resource Area completed a Resource Management Plan (RMP/EIS) in 1987. The Elko RMP did not analyze the wilderness recommendation found in the Proposed Action of this EIS. The Nevada wilderness proposal and alternatives are described and analyzed as part of this EIS.

Public comments received on the draft EIS, the accumulation of additional resource data for the WSAs, the restoration of wilderness study requirements for Oregon split-estate lands in WSA OR-3-195, and an increased opportunity for federal-state land exchange in Idaho since the release of the draft EIS resulted in a total 3,400 acre increase in the suitable wilderness recommendation contained in this final EIS.

The Proposed Action is the preferred alternative and optimizes the protection of existing wilderness resources without significantly impacting other resource uses within and around the Owyhee Canyonlands WSAs.

Changes Between Draft and Final - The final Proposed Action is 3,400 acres larger than the draft proposal. Changes in the Proposed Action between the draft EIS and this final EIS involve five WSAs: WSA OR-3-195, ID-16-48C, ID-16-49A, ID-16-52 and ID-16-53.

There were 10,380 acres of split-estate lands added to WSA OR-3-195 as a result of the Sierra Club vs. Watt decision. Of this acreage, 8,440 acres have been recommended suitable for wilderness. Non-WSA lands totaling 1,480 acres were excluded from the suitable recommendation because of the loss of naturalness due to seedings on these acres. Refined acreage calculations for the WSA resulted in an additional 6,685 acres recommended suitable.

In WSA ID-16-48C, 16,140 acres have been excluded from the suitable recommendation. This reduction was in response to additional data input which indicated that there would be significant impacts to livestock grazing operations should wilderness designation occur.

There were 940 acres of non-WSA land added to the suitable recommendation for WSA ID-16-49A. This addition was in response to increased opportunities to acquire Idaho state lands adjacent to the WSA. The acquisition of the state lands combined with the 940 BLM acres would enhance wilderness management opportunities. Refined acreage calculations for the WSA resulted in an 810 acre reduction in the suitable recommendation.

There were 1,780 acres added to the suitable recommendation for WSA ID-16-52 and 3,985 acres to WSA ID-16-53. Of these acreages, 5,530 acres were added in response to BLM's reassessment of its manageability criteria. The remaining 235 acres cover non-WSA land added in response to increased opportunities to acquire Idaho state lands adjacent to WSA ID-16-53.

ALTERNATIVES CONSIDERED BUT NOT SELECTED FOR ANALYSIS

Several alternatives were identified by the public and BLM prior to the preparation of and during the public comment period on the draft EIS which have not been included in this final EIS. These alternatives are described below and were not selected for analysis for the reasons stated.

One alternative identified by the public was to recommend WSAs ID-16-52 and NV-010-106, much of the eastern portions of WSAs ID-16-49D and ID-111-49E, and much of the southern portion of WSA ID-16-53 (NV-010-103A) as nonsuitable. This alternative was identified to allow expansion of utility corridors through the Owyhee Canyonlands area for overhead transmission lines. The issue of powerline corridors is addressed in this wilderness EIS and is limited to corridors identified by previous planning decisions (Owyhee and Bruneau MFPs, and Elko RMP). Since the previous planning decisions did not provide for expansion of utility corridors, this alternative was not selected for analysis. A statewide Idaho utility corridor study is being

considered to address the issue of corridor route alternatives across Idaho. This study would include corridor route alternatives in southwest Idaho in the vicinity of the Canyonlands WSAs.

An alternative was identified which recommended suitable only the canyon areas of Idaho WSAs ID-16-49A, 116-49D and 111-49E, and portions of the canyon area of WSA OR-3-195(ID-16-48B) upstream from Three Forks, Oregon. Another alternative recommended suitable only the main Owyhee River and East Fork Owyhee River canyons in WSAs OR-3-195(ID-16-48B), ID-16-49A, and ID-16-49D. These alternatives were not selected because there is no appreciable difference between the canyon areas recommended suitable and those recommended nonsuitable and because there were no resource conflicts identified that these alternatives would resolve.

The Committee for Idaho's High Desert (CIHD) proposed both the "Conservationist's Modified All Wilderness Alternative" and the "CIHD 1.2 Million Acre Alternative" (see public comment #306 in Chapter V for a map of the CIHD proposal). The Conservationist's Modified All Wilderness Alternative proposed acquisition of non-federal inholdings, closure of existing roads and ways within the WSAs, and expansion of the wilderness area beyond the WSAs to include adjoining BLM, state and private lands for a total acreage of approximately 460,000 acres, including 30,000 acres of Oregon state land adjoining WSA OR-3-195. After consultation with CIHD, the BLM reevaluated the Modified All Wilderness Alternative to be 482,420 acres of federal land and 34,195 acres of non-federal lands. The 482,420 acre proposal includes all of the existing WSA acreage (446,067 acres) plus 36,353 non-WSA acres that were included in the original roadless units and subsequently dropped from further consideration in the Final Wilderness Inventory Decision because they lacked wilderness characteristics.

CONSERVATIONIST'S MODIFIED ALL WILDERNESS ALTERNATIVE

WSA	OREGON	IDAHO	NEVADA	TOTAL
OR-3-195 (ID-16-48B)	196,910	33,700	----	230,610[1]
ID-16-48C	----	26,910	----	26,910[2]
ID-16-49A	----	89,990	----	89,990[3]
ID-16-49D	----	9,990	----	9,990
ID-111-49E	----	35,130	----	35,130[4]
ID-16-52	----	74,930	----	14,930[5]
ID-16-53 (NV-010-103A)	----	45,143	7,842	52,985[6]
NV-010-106	----	---	21,875	21,875
PUBLIC LAND TOTAL	196,910	255,793	29,717	482,420[7]

[1] Includes 6,210 acres of public land outside of WSA boundary.
[2] Includes 2,310 acres of public land outside of WSA boundary.
[3] Includes 19,830 acres of public land outside of WSA boundary.
[4] Includes 3,590 acres of public land outside of WSA boundary.
[5] Includes 1,780 acres of public land outside of WSA boundary.
[6] Includes 2,633 acres of public land outside of WSA boundary.
[7] An additional 34,195 acres of non-BLM lands (state and private) would be acquired and added to the wilderness proposal.

The Modified All Wilderness Alternative is "the core" for the 1.2 million acre wilderness proposal incorporating approximately 754,000 additional acres of non-WSA lands and other WSA lands beyond the boundaries of the Owyhee Canyonlands WSAs. Of the total 1.2 million acre CIHD proposal, 740,000 acres are in WSAs under review within the Owyhee Canyonlands Wilderness EIS, Owyhee Wilderness Plan Amendment/EIS, Jacks Creek Wilderness EIS and statewide Oregon Wilderness EIS. The remaining 460,000 acres of the CIHD proposal are located in roadless units, or portions of roadless units, which were found to be lacking in wilderness characteristics during the initial and intensive wilderness inventories conducted from 1979 to 1985.

The inventory process sunder Section 603 of the Federal Land Policy and Management Act (FLPMA) has already provided for public comment on the issue of identifying wilderness characteristics for all BLM lands in the states of Oregon, Idaho and Nevada and WSA boundaries have been established. The question of whether or not lands outside these WSA boundaries contain wilderness characteristics will not be reassessed in this final wilderness EIS and alternatives that include lands substantially beyond these boundaries will not be analyzed. Consequently, these two alternatives are dropped from further consideration as not being within the scope of this EIS because the lands included in the proposals have not been identified as wilderness study areas.

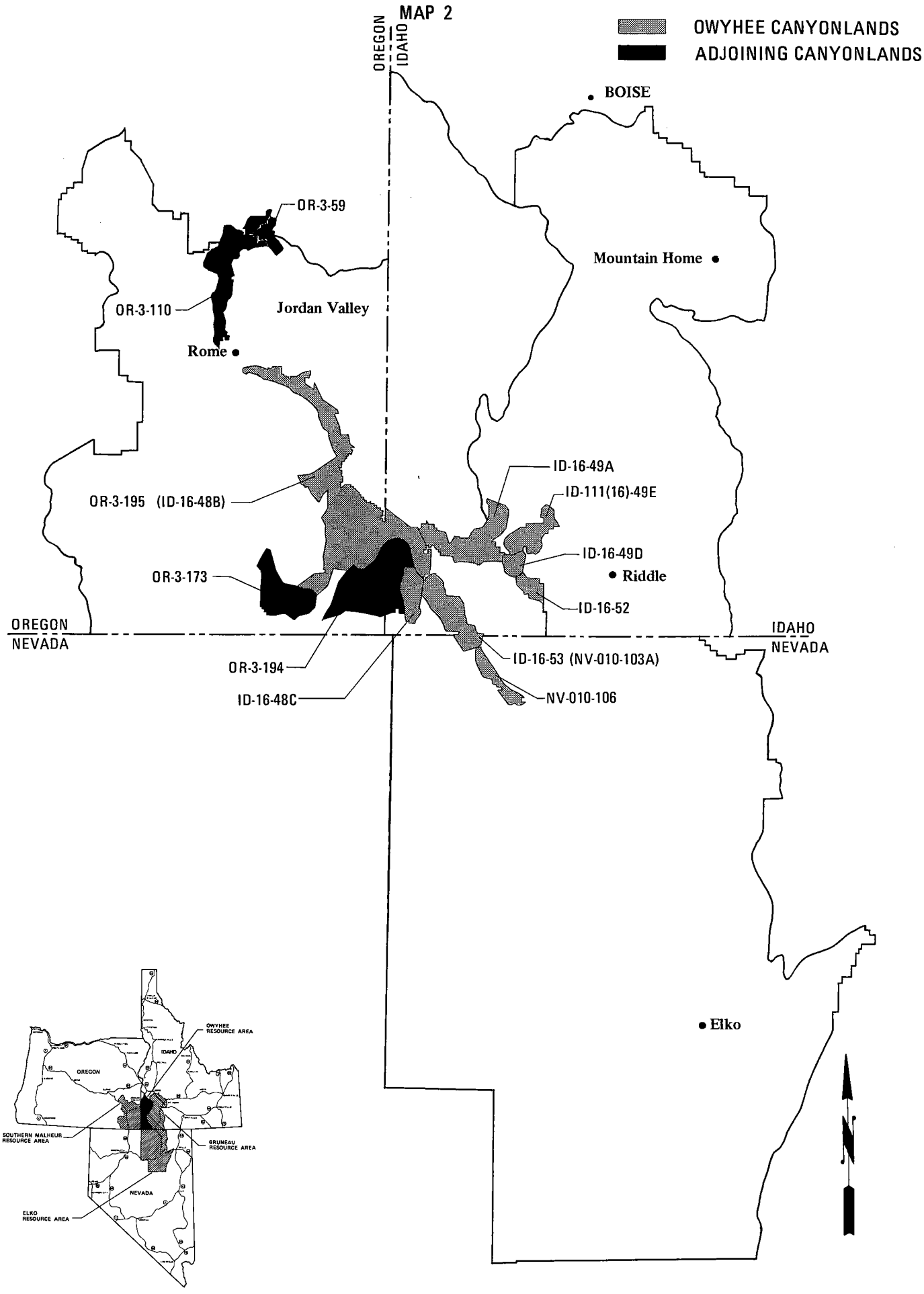
Another alternative identified 3,434,000 acres for wilderness designation; 1,267,000 acres in Oregon, 1,176,000 acres in Idaho and 991,000 acres in Nevada. This alternative generally included lands within the Owyhee River drainage upstream from Rome, Oregon and outside the Duck Valley Indian Reservation. This alternative is also dropped from further consideration as not being within the scope of the EIS because the lands included in the proposal have not been identified as wilderness study areas.

OTHER CONSIDERATIONS

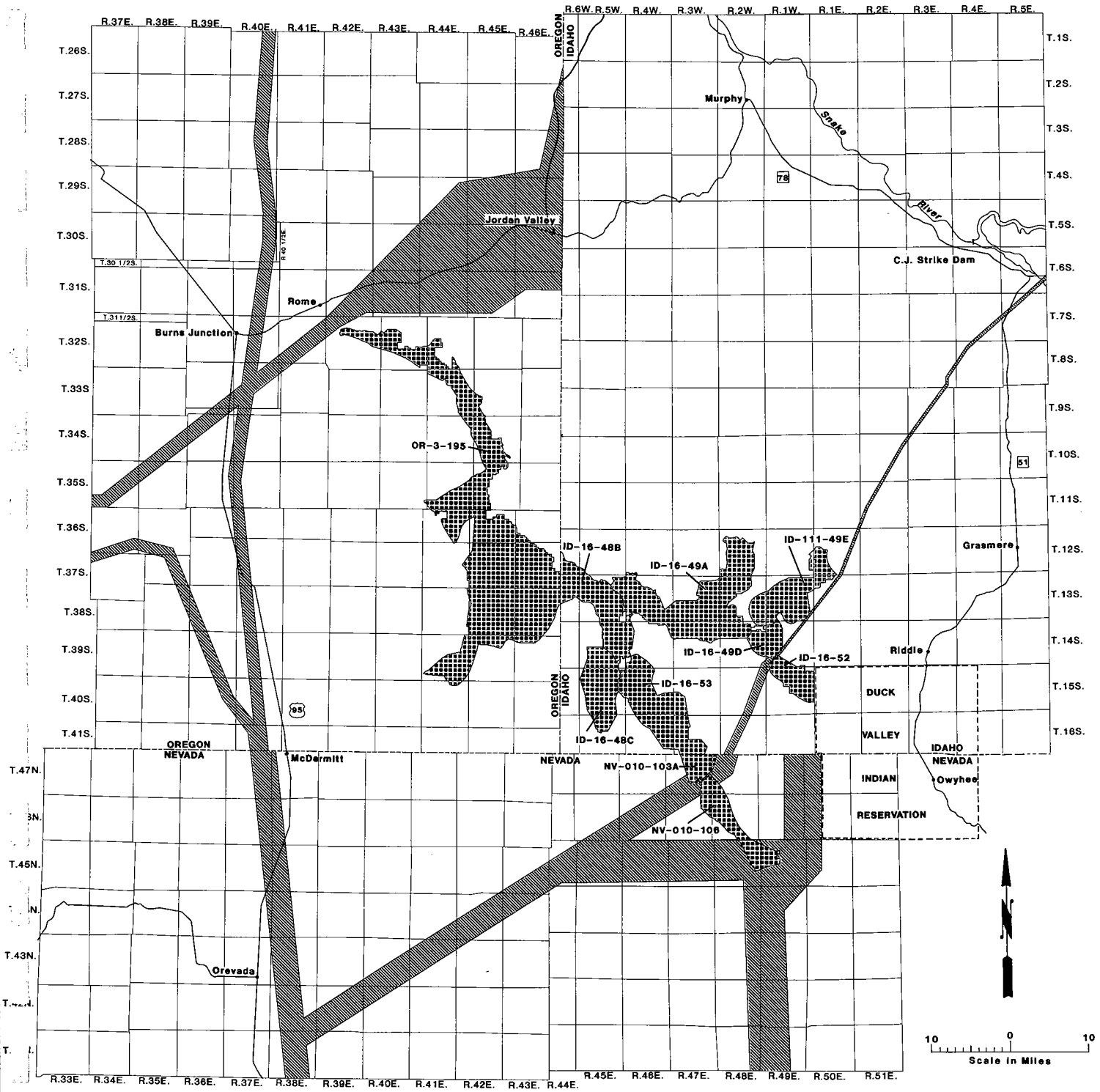
In 1979, the National Park Service (NPS) completed the Owyhee River Wild and Scenic River Study Final Report - Environmental Statement which proposed the main stem of the Owyhee River and East Fork Owyhee River for designation as a wild river under the authority of the Wild and Scenic Rivers Act (PL-542) of 1968. Subsequently, the BLM in Oregon and Idaho made MFP recommendations for considering the Owyhee, East Fork Owyhee and South Fork Owyhee Rivers for designation under the Act. No similar recommendation has been made in Nevada for the South Fork Owyhee River. In 1984, Congress designated the Owyhee River within Oregon as a component of the National Wild and Scenic Rivers System (PL 98-494). The Owyhee Canyonlands Wilderness EIS incorporates this existing designation, addresses an additional wild river designation in Idaho and analyzes the environmental consequences of not managing these areas as wilderness if the Idaho segment were to become a component of the National Wild and Scenic Rivers System.

The Oregon Wilderness EIS contains an analysis for several other WSAs in Oregon and Idaho [WSAs OR-3-59, OR-3-110, OR-3-173 and OR-3-194(ID-16-48A)] associated with the Owyhee River and its tributary canyons. The Proposed

Action and alternatives presented in the statewide Oregon Wilderness EIS have been coordinated with those of the Owyhee Canyonlands Wilderness EIS. The location of adjoining Oregon and Idaho WSAs is shown on Map 2. Five other WSAs in Idaho associated with the drainages of the Owyhee River system were evaluated for wilderness designation under the Owyhee Wilderness Plan Amendment/EIS. These WSAs are associated primarily with the North Fork and Middle Fork of the Owyhee River.



Location of Wilderness Study Areas within the Southern Malheur, Owyhee, Bruneau, and Elko Resource Areas



MAP 2A

UTILITY CORRIDORS

Wilderness Study Areas

Corridors

South Fork Owyhee River Canyon WSA ID-16-48B

CHAPTER II

South Fork Owyhee River Canyon

WSA ID-16-53

CHAPTER II
PROPOSED ACTION AND ALTERNATIVES

The Proposed Action and alternatives for the Owyhee Canyonlands wilderness study areas (WSAs) are presented in a combined or aggregated format. The aggregated format is used because each of the WSAs has similar wilderness characteristics and/or similar resource issues. In addition, each alternative would allow for the management of the Owyhee Canyonlands WSA complex as one integrated management unit encompassing all or portions of seven or eight adjoining WSAs.

The Proposed Action in this final EIS differs in acreage and configuration from that of the draft EIS. The final Proposed Action is 3,400 acres larger because of 1) reinstatement of Oregon split-estate lands in the Owyhee River Canyon WSA OR-3-195, 2) reassessment of resource (livestock) conflicts in the Little Owyhee River WSA ID-16-48C, 3) increased opportunity for federal-state land exchanges in Idaho, and 4) improved boundary configurations. Specific rationales for boundary adjustments for the Proposed Action are contained in Chapter I.

All of the alternatives presented in this final EIS reflect the addition of Oregon split-estate acreages to WSA OR-3-195 resulting from the U.S. District Court decision of April 18, 1985, in Sierra Club vs. Watt.

Since the pattern of future actions within the WSAs cannot be predicted with certainty, assumptions were made to allow the analysis of impacts under the Owyhee Canyonlands WSAs' Proposed Action and other alternatives. These assumptions are the basis of the impacts identified in this document. They are not management plans nor proposals, but represent feasible patterns of activities which could occur under the alternatives analyzed.

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION: Map Series 3

The Proposed Action is BLM's preferred alternative. It recommends that 377,560 acres of public land encompassing portions of eight WSAs are suitable for designation as wilderness. It further recommends that 70,782 acres are nonsuitable for wilderness designation (Table II-1).

In 1984, the Owyhee River in Oregon was congressionally designated as a wild river under the Wild and Scenic Rivers Act of 1968. This designation would continue in Oregon under this and all alternatives. Additional wild river designation of the Owyhee River in Idaho or Nevada is not projected in this alternative.

There would be 2,815 acres of the Owyhee River Management Area (an existing BLM administratively designated special recreation management area) in the lands recommended nonsuitable for wilderness designation. This administrative designation would remain in place [see the No Action (No Wilderness) Alternative for management details].

TABLE II-1

PROPOSED ACTION
ACRES RECOMMENDED SUITABLE/NONSUITABLE AS WILDERNESS (BLM ACRES)[1]

WSA	Nonsuitable as Wilderness				Suitable as Wilderness			
	OREGON	IDAHO	NEVADA	TOTAL	OREGON	IDAHO	NEVADA	TOTAL
OR-3-195 (ID-16-48B)	38,660	0	--	38,660	152,040	33,700	--	185,740
ID-16-48C	--	16,140	--	16,140	---	8,460	--	8,460
ID-16-49A	--	4,250	--	4,250	---	67,530	--	67,530[2]
ID-16-49D	--	440	--	440	---	9,550	--	9,550
ID-111-49E	--	80	--	80	---	31,880	--	31,880[3]
ID-16-52	--	200	--	200	---	12,950	--	12,950
ID-16-53 (NV-010-103A)	--	0	2,662	2,662	---	42,745	5,180	47,925[4]
NV-010-106	--	--	8,350	8,350	---	---	13,525	13,525
BLM TOTAL	38,660	21,110	11,012	70,782	152,040	206,815	18,705	377,560

[1] An additional 14,380 acres of non-BLM lands would be included in the suitable area following land acquisition (Table II-2).
[2] Includes 1,620 acres of public land outside the WSA boundary.
[3] Includes 420 acres of public land outside the WSA boundary.
[4] Includes 235 acres of public land outside the WSA boundary.

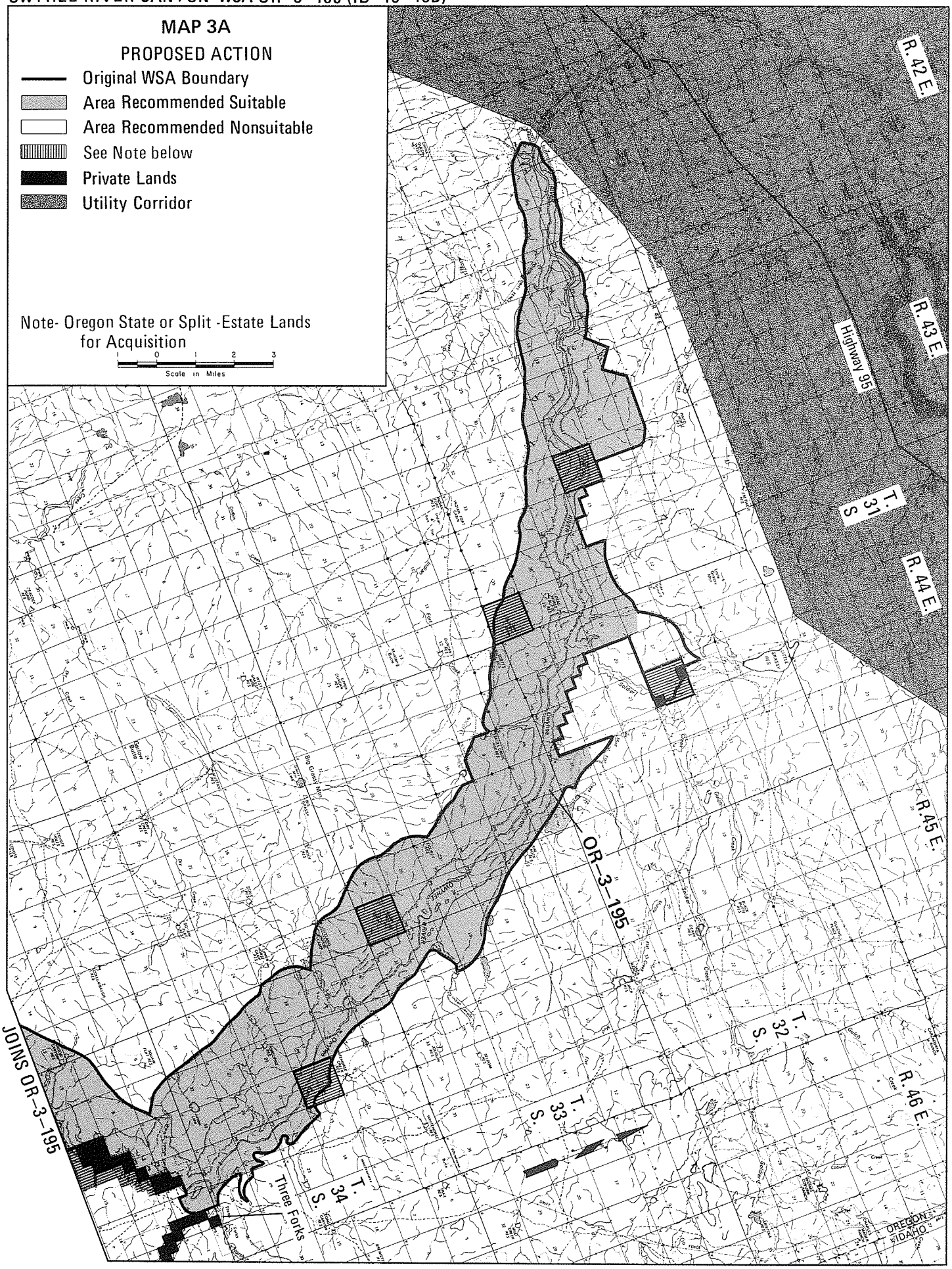
The Owyhee Canyonlands Wilderness Area would be managed in accordance with the BLM Wilderness Management Policy to preserve its wilderness character. In addition to providing a natural setting for primitive recreation experiences, management actions would also provide outstanding opportunities for primitive recreation and solitude. The area would also be managed for special or supplemental wilderness values. The proposed wilderness area would be managed in conjunction with any wilderness designation within the adjoining WSAs OR-3-59, OR-3-110 and OR-3-173 of Oregon (Map 2 at the end of Chapter I).

Specific management actions in the WSAs are shown below.

a. Land Acquisition

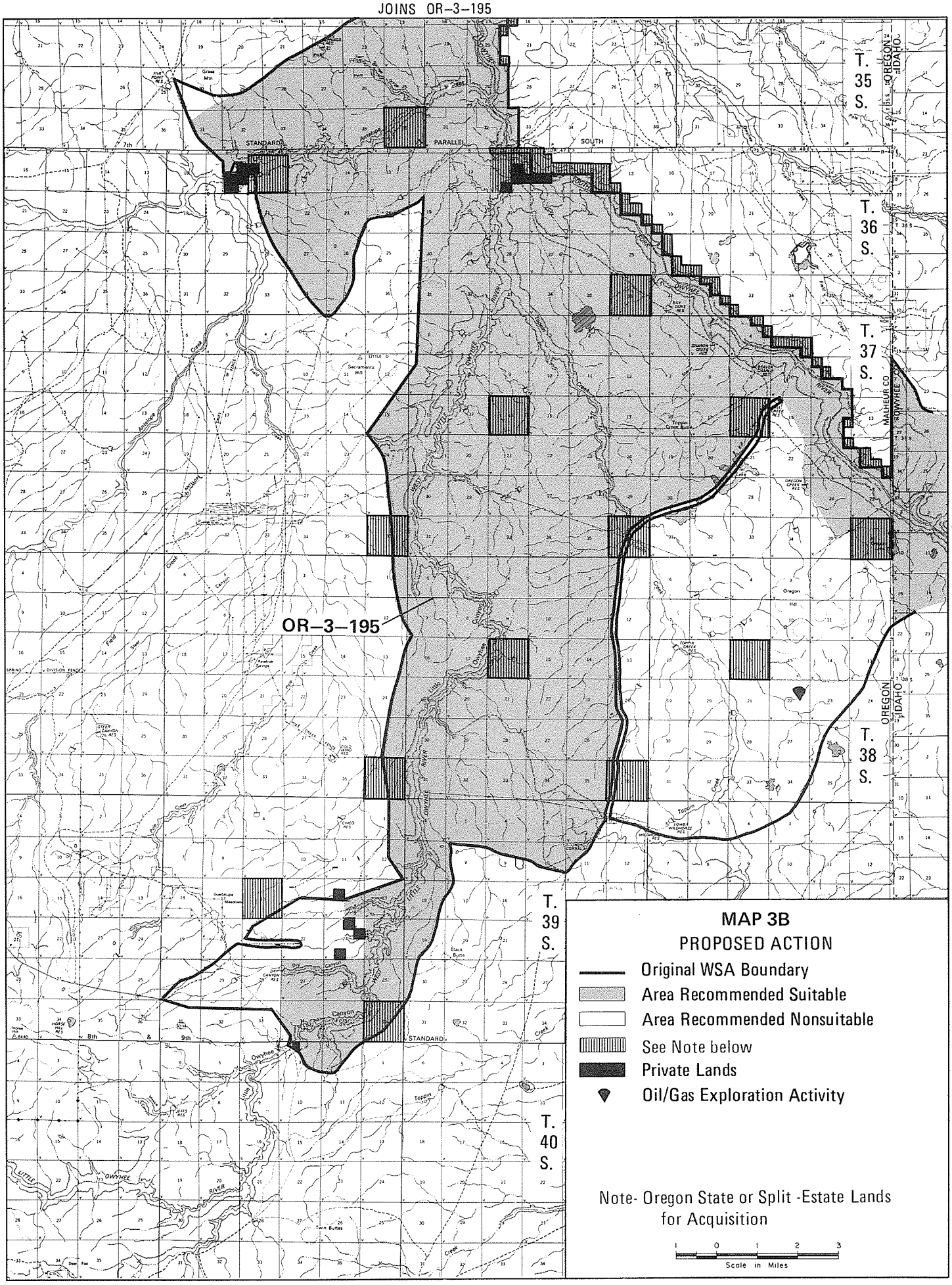
Continue negotiations with state land agencies to exchange lands and/or acquire subsurface mineral rights (Oregon split-estate lands). Negotiations with private land owners would also be initiated to acquire properties. The lands recommended for fee title acquisition or exchange and for mineral rights acquisition are shown on Table II-2. These lands, particularly those in the canyon areas, have the potential to be developed for recreation resort facilities, irrigated pasture lands, and/or mineral and energy resources.

OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)

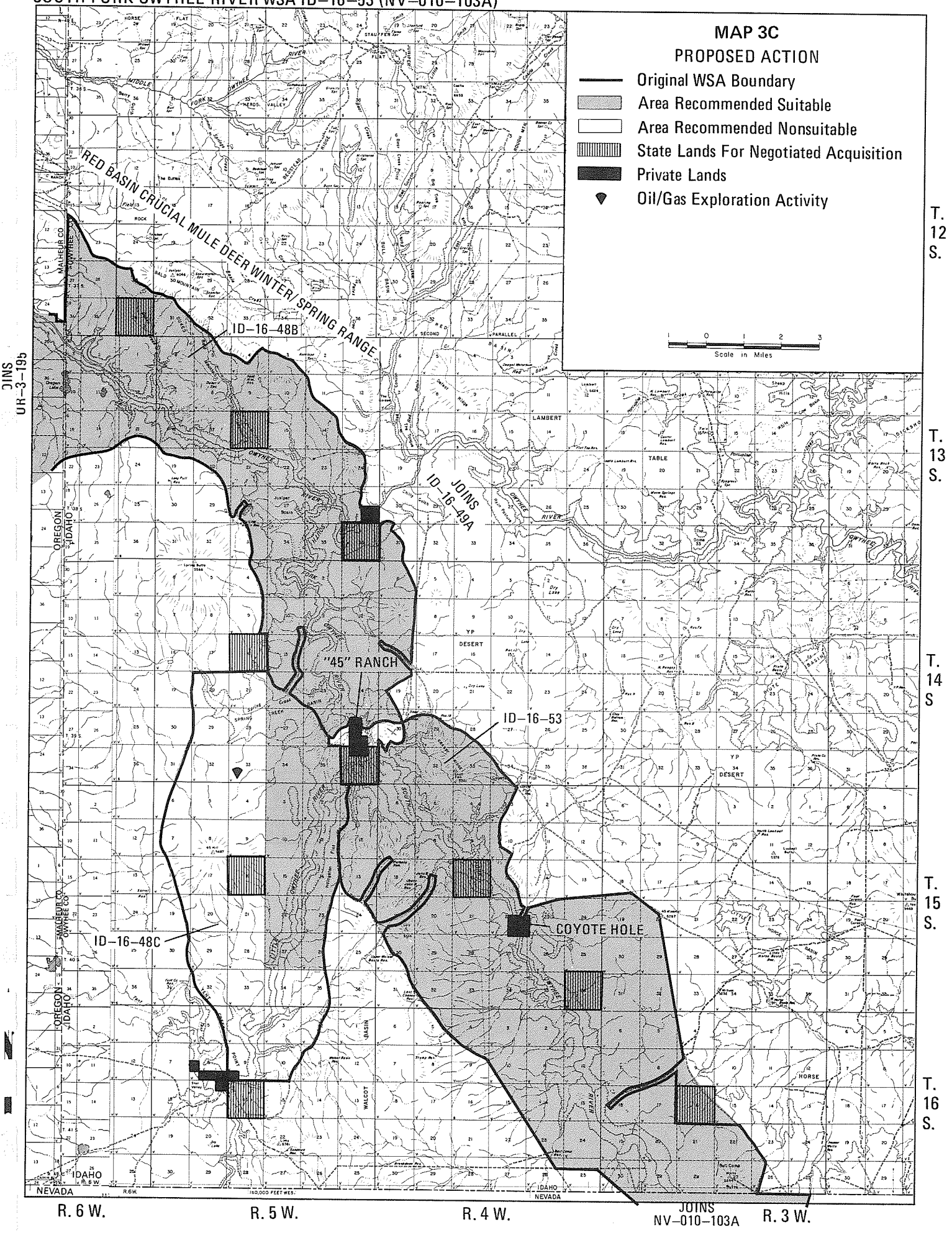


OWYHEE RIVER CANYON WSA OR-3-195 (ID-16-48B)

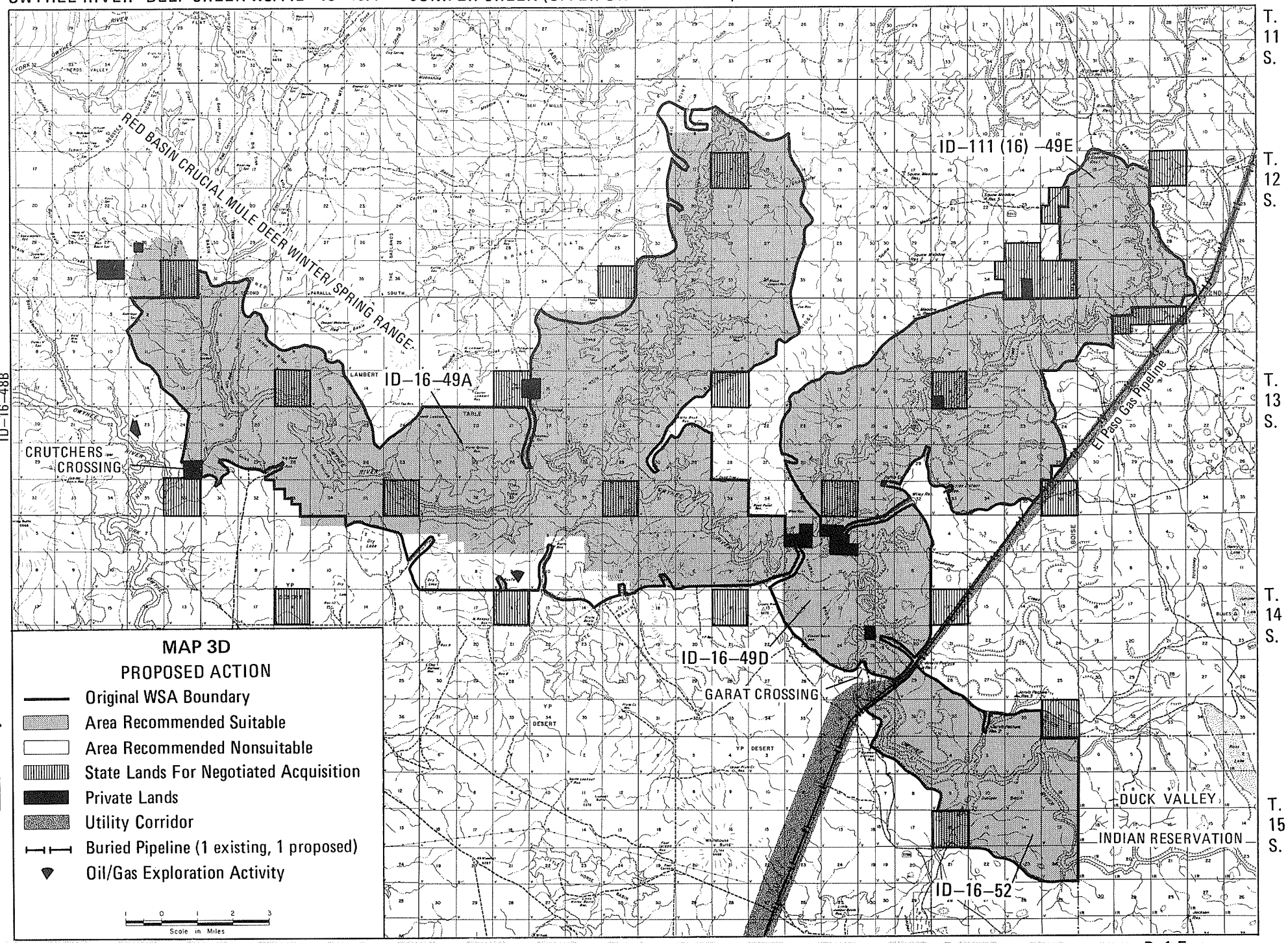
JOINS OR-3-195



OWYHEE RIVER CANYON WSA OR-3-195 (ID-16-48B)
LITTLE OWYHEE RIVER WSA ID-16-48C
SOUTH FORK OWYHEE RIVER WSA ID-16-53 (NV-010-103A)



YATAHONEY CREEK WSA ID–16–49D
BATTLE CREEK WSA ID–111 (16) –49E
OWYHEE RIVER–DEEP CREEK WSA ID–16–49A JUNIPER CREEK (UPPER OWYHEE RIVER) ID–16–52



OWYHEE CANYON WSA NV–010–106
SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)

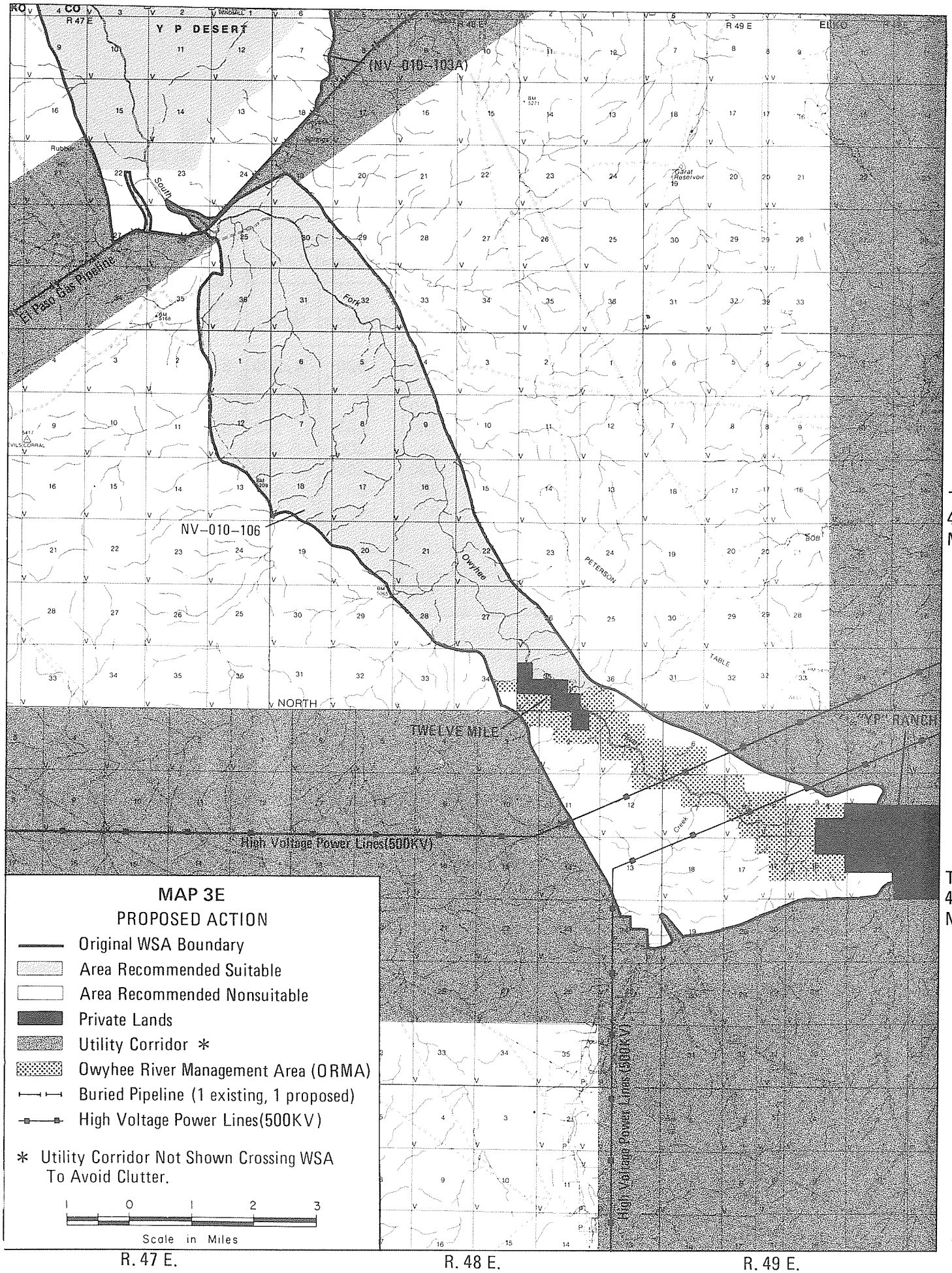


TABLE II-2

LANDS RECOMMENDED FOR ACQUISITION AND INCLUSION IN THE SUITABLE BLM WILDERNESS RECOMMENDATION UNDER THE PROPOSED ACTION[1]

WSA	Lands Acquisition							Total Mineral Rights Acquisition (split-estate)
	Acres of Inholding Lands			Acres of Adjacent or Interlocked Lands			Total Land Acquisition	
	STATE	PRIVATE	TOTAL	STATE	PRIVATE	TOTAL		
OR-3-195 (ID-16-48B)	1,280	---	1,280	3,280	920	4,200	5,480	8,440
ID-16-48C	--	---	--	190	---	190	190	---
ID-16-49A	2,560	---	2,560	780	160	940	3,500	---
ID-16-49D	--	40	40	--	200	200	240	---
ID-111-49E	1,240	40	1,280	320	200	520	1,800	---
ID-16-52	--	---	--	800	---	800	800	---
ID-16-53 (NV-010-103A)	1,280	160	1,440	930	---	930	2,370	---
NV-010-106	--	---	--	--	---	--	---	---
TOTAL	6,360	240	6,600	6,300	1,480	7,780	14,380	8,440

[1] A total of 27,020 acres of state and private lands associated with the WSAs are being considered for acquisition (exchange or purchase) regardless of wilderness designation. This table shows that portion of the acreage which would be included in the suitable area should the transfer of ownership occur.

b. Recreation Management Actions

Management actions pertaining to WSA OR-3-195 are taken from the Owyhee National Wild River Management Plan.

1) Maintain the existing "45" dam (T.14S., R.5W., Sec. 25) to allow for boater passage and continued operation for irrigation purposes on the South Fork Owyhee River within Idaho. Dam maintenance would consist of replacing rock materials which become dislodged during annual high water flows. The dam site and nearby rock borrow pit are accessed by an established road.

2) Maintain existing public river access roads, acquire recreation easements to provide public access through private property and construct recreation facilities (vault toilets and interpretive signs) at boating launch sites.

Existing public access roads would be maintained at present construction levels at the following locations:

Owyhee River -
(a) Garat Crossing (Pipeline Crossing, Idaho) between WSAs ID-16-49D and 16-52;
(b) Battle Creek confluence between WSAs ID-16-49A, 16-49D and 111-49E;
(c) Crutcher's Crossing between WSAs ID-16-48B and ID-16-49A;
(d) Three Forks adjacent to WSA OR-3-195.
South Fork Owyhee River -
(a) Pipeline Crossing, Nevada, between WSAs NV-010-103A and NV-010-106;
(b) "45" Ranch between WSAs ID-16-48B, ID-16-48C and ID-16-53;
(c) Coyote Hole in WSA ID-16-53.

Acquire recreation easements at the "YP" Ranch at the southern tip of WSA NV-010-106, and at the "45" Ranch between WSA ID-16-48B and ID-16-53 and maintain roads to provide public boating access into the suitable area. Recreationalists are currently obtaining permission from the private property owners at the time they launch their trips.

Acquire a recreation easement and upgrade the road access into WSA NV-010-106 at Twelve Mile. The upgraded road would provide additional public access to the river and serve as part of the southern boundary of the suitable area. Construction standards would not exceed those at other major Owyhee River access points. The new road would alleviate projected recreation use pressure on the private lands of the "YP" Ranch rather than encourage additional use of the river.

Construct vault toilets on BLM lands at the Garat Crossing in WSA ID-16-49D and at Three Forks in WSA OR-3-195. With the Twelve Mile, "YP" Ranch and "45" Ranch easements, vault toilets would be placed on private property within the South Fork Owyhee River Canyon. Each of the toilet sites would also have one interpretive/informational kiosk (small, roofed, sign structure) and registration box.

3) Close 105.6 miles of vehicle routes (interior or cherrystem roads and ways) to the river or across the plateau within the suitable area to general public recreational use. Vehicle routes lying outside or adjacent to the suitable area would not be closed. The miles of roads and ways closed within each WSA under the Proposed Action and other alternatives are shown in Table II-3. Off-road vehicle (ORV) travel would be permitted on nonsuitable lands but not within the suitable area.

4) Stabilize historic cultural sites (stone and wood buildings) on BLM lands (Maps 3F through 3J). These sites include:

a) WSA OR-3-195(ID-16-48B)
State line: T.37S., R.48E., Sec. 23, Oregon
Juniper Basin: T.14S., R.5W., Sec. 28, Idaho

b) WSA ID-16-53
Bull Camp: T.16S., R.4W., Sec. 13, Idaho

Coordinate with state historic preservation offices and county historical societies to stabilize historic cultural sites on private inholdings and

adjoining lands which are recommended for acquisition/exchange or easement purchase under the Proposed Action (Maps 3F through 3J). These sites include:

a) Five Bar: T.36S., R.47E., Secs. 15 and 16, Oregon
b) Crutcher's Crossing: T.13S., R.5W., Sec. 25, Idaho
c) Battle Creek confluence: T.14S., R.2W., Secs. 1 and 2, Idaho
d) Jarvis Creek confluence: T.14S., R.1W., Sec. 19, Idaho
e) Coyote Hole: T.15S., R.4W., Sec. 22, Idaho
f) Twelve Mile: T.46N., R.48E., Sec. 35, Nevada

Reconstruction of roofs on otherwise complete structures would be the primary stabilization measure. Stone structures with only portions of walls standing would be stabilized using compatible mortars where appropriate. Wood structures that are substantially intact (roofs in place) would be stabilized using applications of wood preservative solutions or replacement of rotted timbers, with sod roofing materials being replaced. Wood structures in collapsed, rotted or otherwise poor condition would be allowed to deteriorate naturally since there are no effective stabilization measures other than complete reconstruction. No cement foundations or other soil disturbing activities would occur around buildings. Access would be by vehicle along cherrystem roads or by helicopter.

TABLE II-3

CLOSURE OF ROADS AND WAYS TO PUBLIC RECREATION USE UNDER THE PROPOSED ACTION AND OTHER ALTERNATIVES

	Miles of Roads/Ways Closed by Alternative[1]											
	Proposed Action		No Action				Canyon-lands Wilder-ness		Wildlife Wilder-ness		All Wilder-ness	
			Alter-native		Sub-alter-native							
WSA	Road	Way	Road	Way	Road	Way	Road	Way	Road	Way	Road	Way
OR-3-195 (ID-16-48B)	5.8	56.1	0	0	0	0	2.5	1.8	5.8	34.5	20.3	82.5
ID-16-48C	0	0	0	0	0	0	0	0	0	0	0	0
ID-16-49A	6.3	11.5	0	0	0	0	0	1.6	6.3	8.0	8.5	11.5
ID-16-49D	1.3	1.0	0	0	0	0	0	0	1.3	1.0	1.3	1.0
ID-111-49E	1.3	1.0	0	0	0	0	0	0	1.3	1.0	1.3	1.0
ID-15-52	0.5	0	0	0	0	0	0	0	0	0	0.5	0
ID-16-53 (NV-010-103A)	5.5	14.3	0	0	0	0	0	0	2.3	14.3	6.5	14.3
NV-010-106	0	1.0	0	0	0	0	0	0	0	0	0	4.0
TOTAL MILES	20.7	84.9	0	0	0	0	2.5	3.5	17.0	58.8	38.4	114.3

[1] Vehicle routes shown on Maps 3F through 3J.

5) Establish a carrying capacity for river running activities on the Owyhee River system at 182 trips per year with a total of 30,030 user days per year (Table II-4A and 4B). Establish no carrying capacity for backpacking/ horsepacking, hunting or other activities until such time as use levels warrant.

It is anticipated that river running would reach 37% (11,000 user days) of the carrying capacity in 20 years while other recreation activities would reach a total of 4,435 user days.

TABLE II-4A

OWYHEE RIVER CARRYING CAPACITIES WITHIN WSAs

	Starts/day (parties)	Max. Party Size	Parties/ Year	People/ Year	User Days
Above Three Forks Three Forks to Rome	2 4	15 15	182 364	2,730 5,460	13,650 16,380
TOTAL	6	--	546	8,190	30,030

TABLE II-4B

RIVER TRIP STARTS AND USER DAYS PERMITTED IN THE OWYHEE CANYONLANDS UNDER THE CARRYING CAPACITY

Affected WSAs	Length of Time in WSAs (days)		Number of Trips/Year		Number of User Days/Year	
	E. Fork Owyhee	S. Fork Owyhee	E. Fork Owyhee	S. Fork Owyhee	E. Fork Owyhee	S. Fork Owyhee
ID-16-49A, ID-16-49D	3		91		4,095	
OR-3-195(ID-16-48B) Above Confluence ID-16-53(NV-010-103A) ID-16-106		3		91		4,095
OR-3-195(ID-16-48B) Above Three Forks	Main Owyhee		Main Owyhee		Main Owyhee	
	2		182		5,460	
OR-3-195(ID-16-48B) Below Three Forks	3		364		16,380	
TOTAL	8		546		30,030	

c. Rangeland Management (Vegetation, Livestock and Wildlife) Actions

Continue livestock grazing and develop allotment management plans (AMPs) and grazing decisions/agreements for 24 allotments (Maps 3F through 3J) which would allow the following:

1) Continue grazing use within the suitable area at approximately the level occurring at the time of designation. Increases in grazing use would be permitted in nonsuitable areas as forage becomes available. Livestock and wildlife use in both suitable and nonsuitable areas would be limited to an overall average of less than 50% utilization of available forage. A monitoring program would be used to ensure that the utilization level is not exceeded. Existing and projected livestock use under the Proposed Action and other alternatives is shown on Table II-5A and 5B.

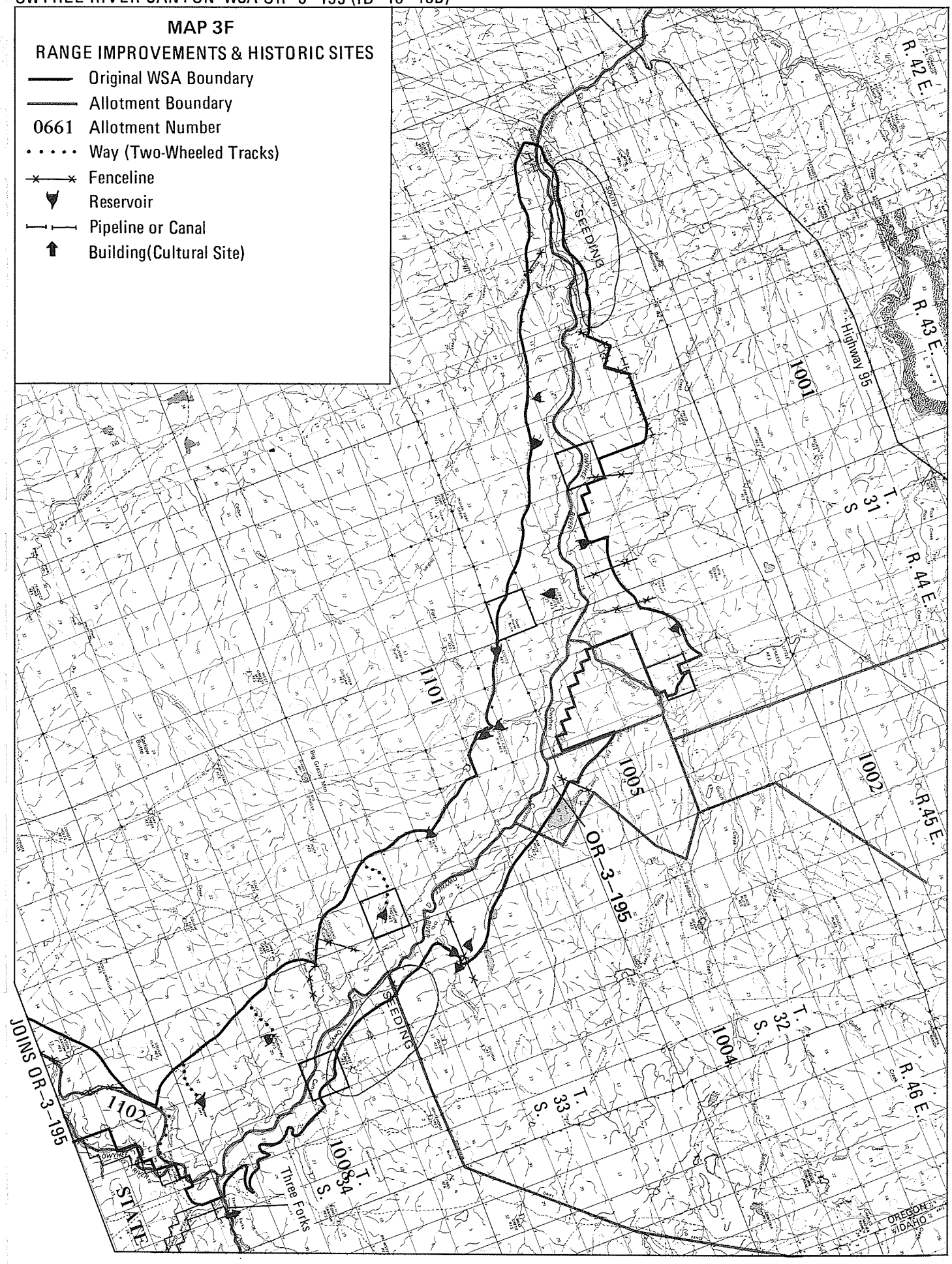
TABLE II-5A

ESTIMATED CURRENT AND 20-YEAR LIVESTOCK USE (AUMs)
WITHIN WSA BOUNDARIES BY ALTERNATIVE BY WSA[1]

WSA	Current Use	Proposed Action	No Action		Canyonlands	Wildlife	All Wilderness
			Alternative	Subalternative			
OREGON							
3-195(16-48B)	11,285	11,385	20,785	20,785	18,285	11,235	11,235
IDAHO							
3-195(16-48B)	1,280	1,280	1,750	1,750	1,670	1,280	1,280
16-48C	1,255	1,910	2,100	2,100	2,100	1,910	1,255
16-49A	5,320	5,445	6,880	6,880	6,800	5,595	5,320
16-49D	830	830	970	970	970	830	830
111-49E	2,720	2,720	3,250	3,250	3,250	2,720	2,720
16-52	1,635	1,635	1,935	1,935	1,935	1,785	1,635
16-53(103A)	1,220	1,220	2,295	2,295	2,295	1,665	1,220
NEVADA							
16-53(103A)	960	1,008	1,008	1,008	1,008	446	446
010-106	2,515	2,866	2,866	2,866	2,866	1,207	1,207
TOTAL	29,020	30,299	43,839	43,839	41,179	28,873	27,148

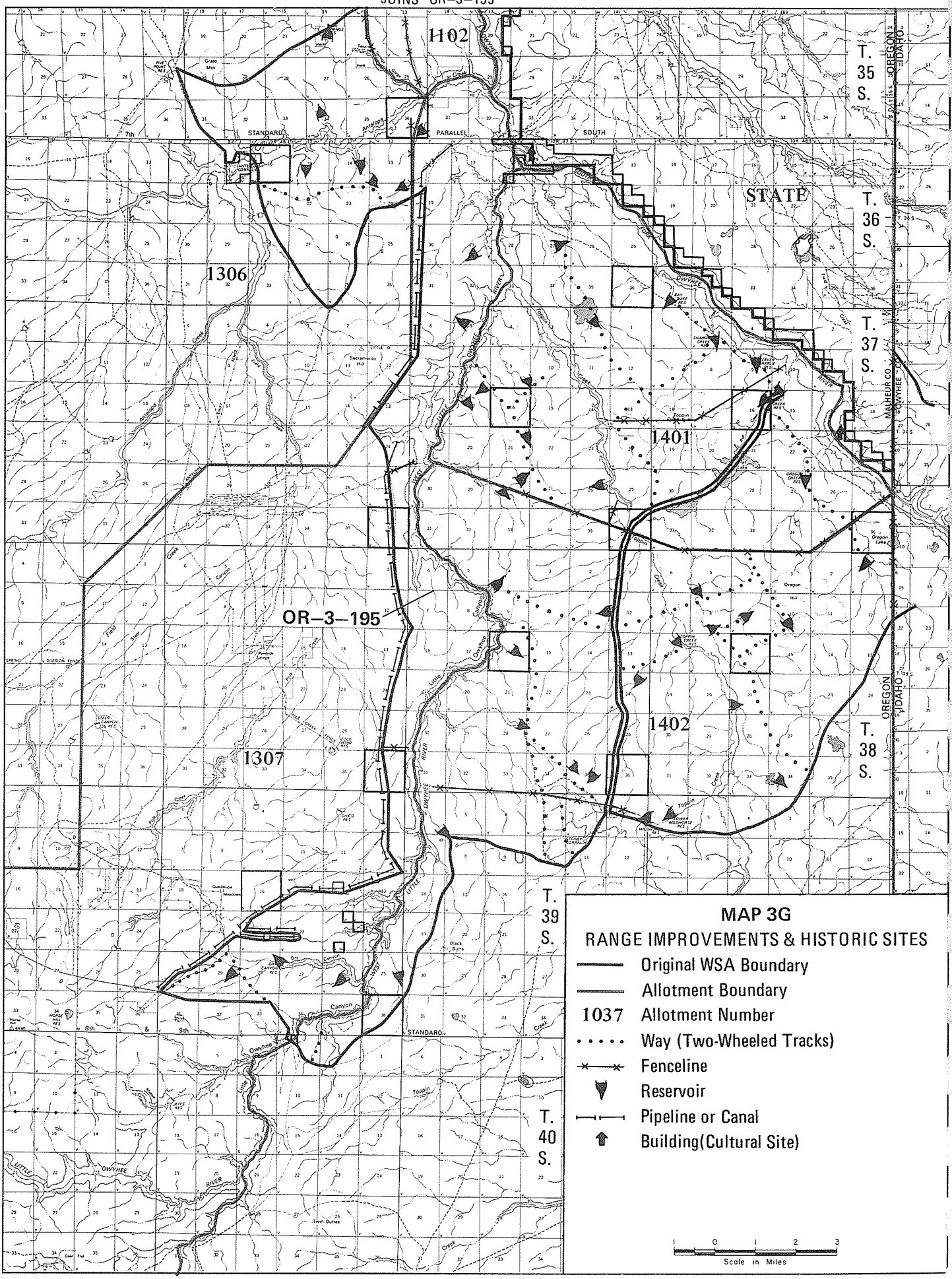
[1] Projected increases in livestock AUMs would occur only on nonsuitable lands. Decreases in AUMs would occur evenly (on a per acre basis) on both suitable and nonsuitable lands throughout the WSAs. Livestock use on non-WSA lands are shown in the affected allotment totals found in Table II-5B.

OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)

JOINS OR–3–195



MAP 3G

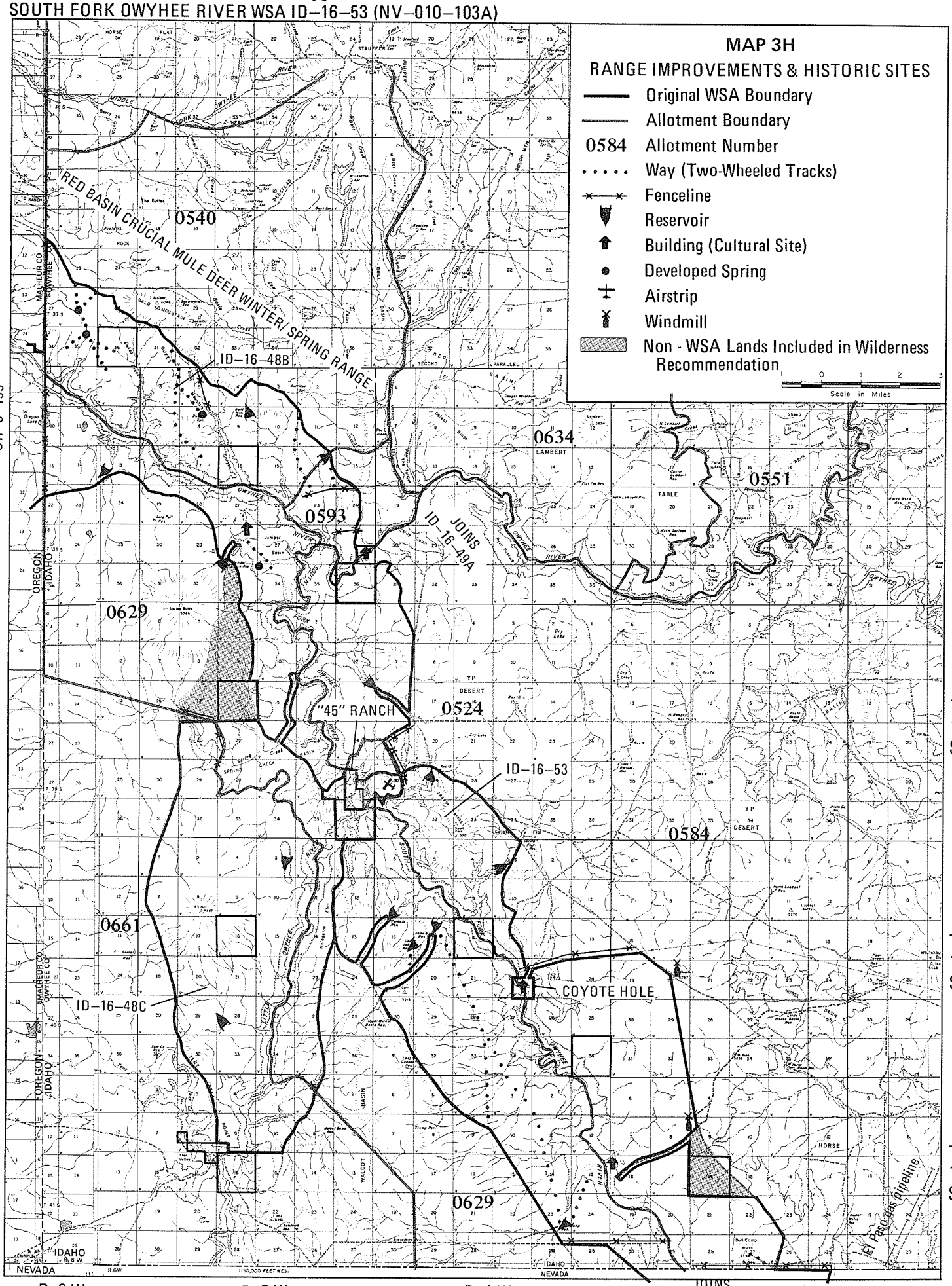
RANGE IMPROVEMENTS & HISTORIC SITES

- Original WSA Boundary
- Allotment Boundary
- 1037 Allotment Number
- Way (Two-Wheeled Tracks)
- Fenceline
- Reservoir
- Pipeline or Canal
- Building(Cultural Site)

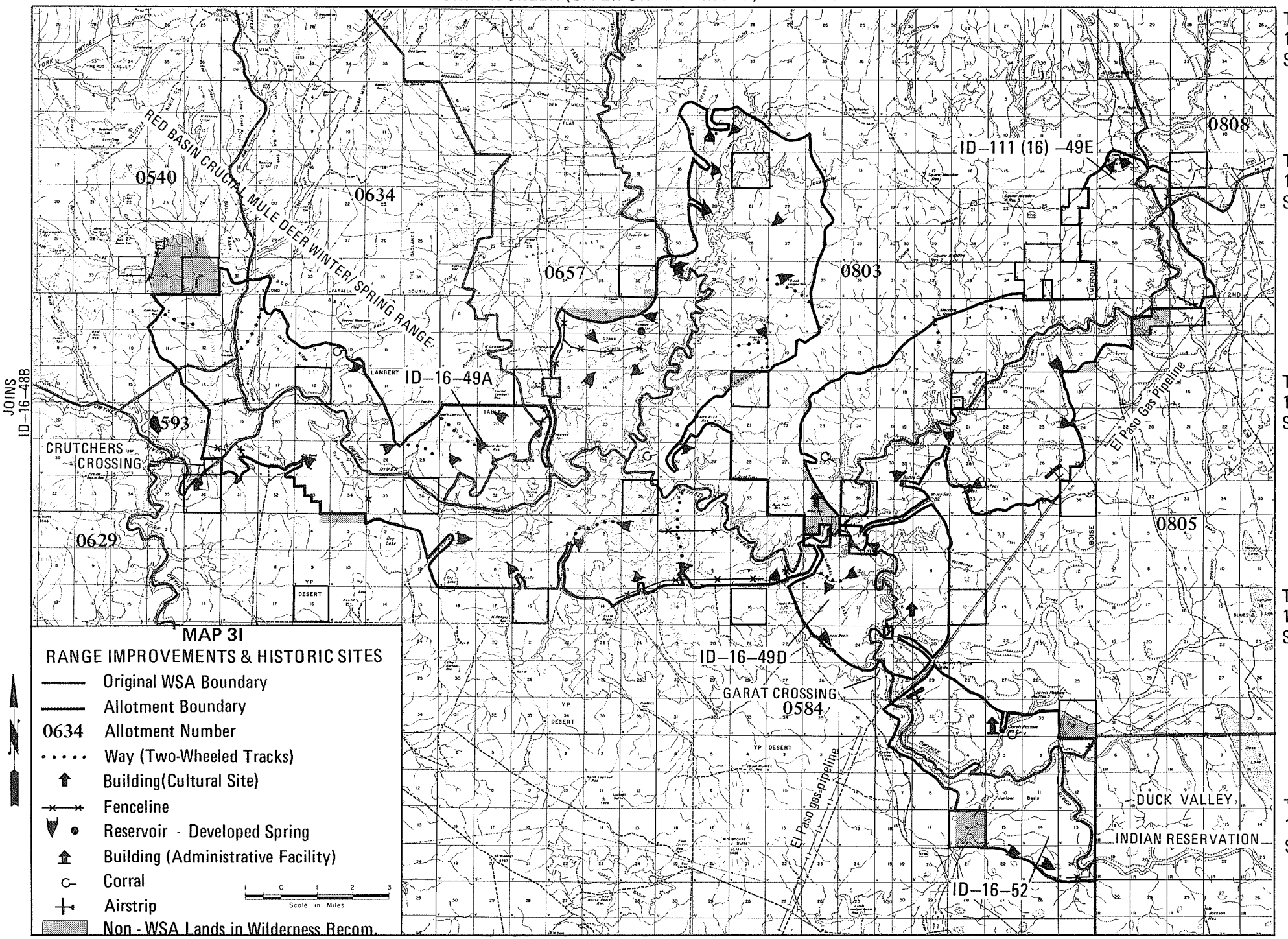
Scale in Miles

0 1 2 3

OWYHEE RIVER CANYON WSA OR-3-195 (ID-16-48B)
LITTLE OWYHEE RIVER WSA ID-16-48C
SOUTH FORK OWYHEE RIVER WSA ID-16-53 (NV-010-103A)



YATAHONEY CREEK WSA ID–16–49D
BATTLE CREEK WSA ID–111 (16) –49E
OWYHEE RIVER–DEEP CREEK WSA ID–16–49A JUNIPER CREEK (UPPER OWYHEE RIVER) ID–16–52



MAP 31

RANGE IMPROVEMENTS & HISTORIC SITES

- Original WSA Boundary
- Allotment Boundary
- 0634 Allotment Number
- Way (Two-Wheeled Tracks)
- Building(Cultural Site)
- Fenceline
- Reservoir - Developed Spring
- Building (Administrative Facility)
- Corral
- Airstrip
- Non - WSA Lands in Wilderness Recom.

Scale in Miles: 0 1 2 3

OWYHEE CANYON WSA NV–010–106

SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)

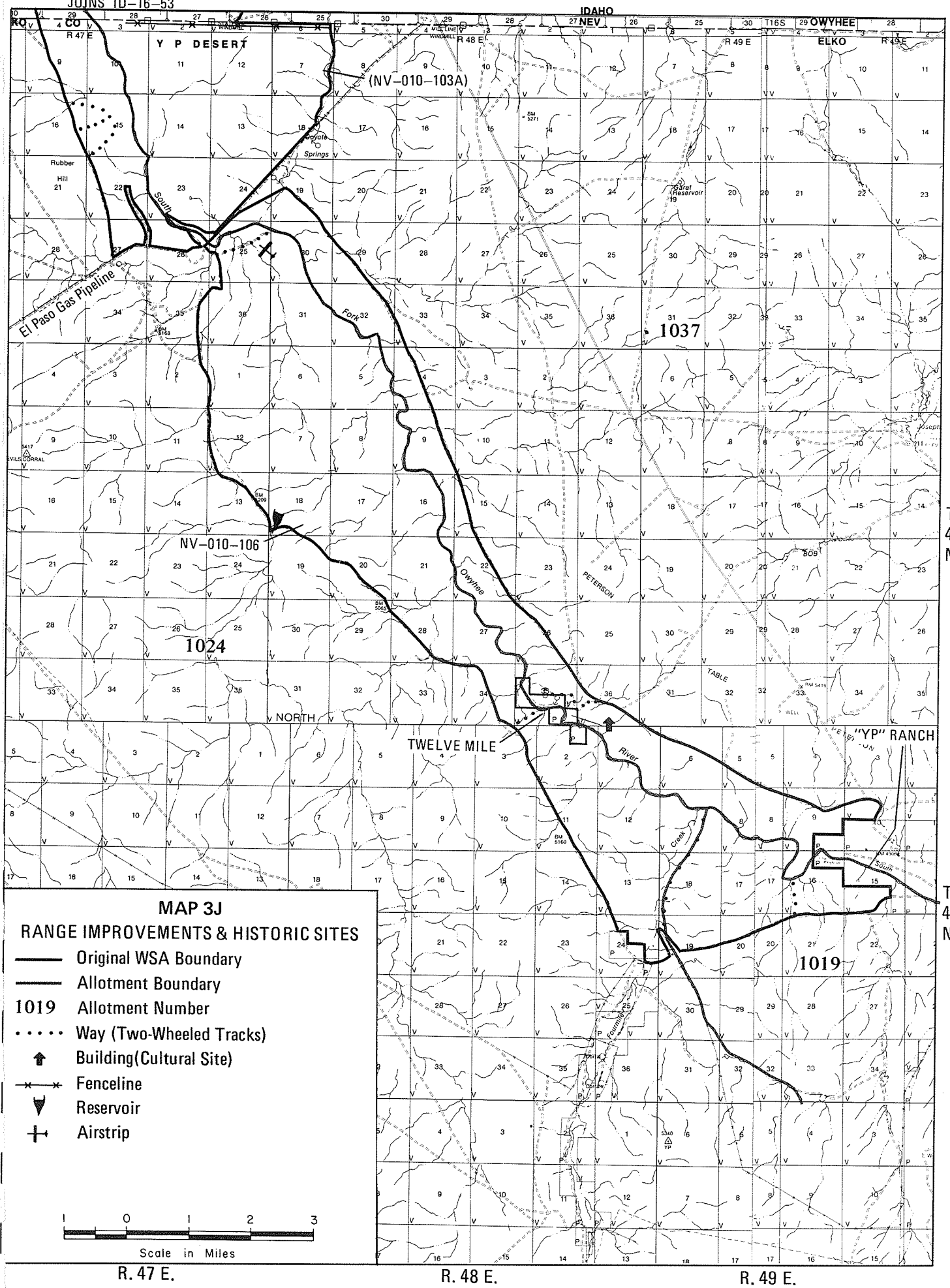


TABLE II-5B

CURRENT AND ESTIMATED 20-YEAR LIVESTOCK USE (AUMs)
WITHIN AFFECTED ALLOTMENTS BY ALTERNATIVE BY ALLOTMENT

Allotment Name and Number	Current Active Preference	(1982) Licensed Active Use	Proposed Action	No Action (No Wilderness)[1]	Canyonlands Wilderness	Wildlife Wilderness	All Wilderness
OREGON							
Arock 1001	10,467	13,949	13,280	14,105	14,105	13,280	13,280
Willow Creek 1004	10,521	10,709	11,970	11,970	12,020	12,020	11,970
Raburn 1005	1,040	1,040	1,040	1,255	1,255	1,255	1,040
Whitehorse 1008	4,478	4,425	4,480	4,480	4,480	4,480	4,480
Jackies Butte 1101	14,334	14,742	14,740	21,610	21,610	14,740	14,740
Ambrose Maher 1102	580	580	580	580	580	580	580
Campbell 1306	14,514	13,032	33,110	35,065	35,065	34,440	33,110
Louse Canyon Comm. 1307	11,533	11,512	11,535	15,115	14,720	11,535	11,535
Anderson 1401	2,964	4,227	2,965	6,565	6,565	2,965	2,965
Star Valley Comm. 1402	6,901	5,285	7,315	7,715	7,715	7,315	7,315
IDAHO							
Garat Individual 0524	80	80	175	175	175	175	175
Bull Basin 0540	3,726	3,203	4,470	4,470	4,470	4,470	4,470
Garat 0584	33,305	15,679	22,775	25,725	25,725	23,025	22,775
Crutchers Crossing 0593	138	140	140	385	225	160	140
"45" 0629	2,152	2,159	2,590	6,160	6,160	2,835	2,280
Castlehead-Lambert 0634	3,123	3,061	4,505	5,285	5,285	4,530	4,505
Nickel Creek 0657	4,891	3,531	9,275	9,275	9,275	9,275	9,275
Tent Creek 0661	1,780	1,780	4,475	5,800	5,800	4,475	1,970
Big Springs 0803	17,851	16,103	17,865	19,765	19,765	17,915	17,865
Riddle 0805	27,199	25,343	24,755	25,670	25,670	24,755	24,755
Northwest 0808	13,400	12,103	19,905	19,905	19,905	19,905	19,905
NEVADA							
Petan-Owyhee 1019	2,094	2,091	2,191	2,191	2,191	1,047	1,047
Owyhee 1024	30,225	12,448	37,428	37,428	37,428	15,112	15,112
YP 1037	13,023	11,840	15,771	15,771	15,771	6,512	6,512
TOTAL	230,319	189,602	267,335	296,465	295,960	236,801	231,801

[1] For both the Alternative and Subalternative.

The percentage of available forage allocated to livestock and wildlife in each of the WSAs under the Proposed Action and other alternatives is shown on Table II-5C.

TABLE II-5C

PERCENTAGE OF AVAILABLE FORAGE (NOT TO EXCEED 50% UTILIZATION) ALLOCATED TO LIVESTOCK AND WILDLIFE UNDER THE PROPOSED ACTION AND ALL ALTERNATIVES

WSA	Livestock Allocation					Wildlife Allocation				
		Canyons					Canyons			
	Plateau	Main Owyhee	East Fork [1]	South Fork	Little Owyhee	Plateau	Main Owyhee	East Fork [1]	South Fork	Little Owyhee
OREGON										
3-195(16-48B)	97	0	--	--	--	3	100	--	---	--
IDAHO										
3-195(16-48B)	95-97	0	97	95	--	3-5	100	3	5	--
16-48C	95	--	--	--	95	5	---	--	---	5
16-49A	97	--	0	--	--	3	---	100	---	--
16-49B	97	--	0	--	--	3	---	100	---	--
111-49E	97	--	0	--	--	3	---	100	---	--
16-52	97	--	0	--	--	3	---	100	---	--
16-53(103A)	95-97	--	--	95	--	3-5	---	--	5	--
NEVADA										
16-53(103A)	97	--	--	97	--	3	---	--	3	--
106	97	--	--	97	--	3	---	--	3	--

[1] Includes major tributary streams: Deep Creek and Battle Creek.

2) Conduct prescribed burning and seeding projects on the plateau covering 20,800 acres of suitable lands and 7,500 acres of nonsuitable lands (Maps 3F through 3J). Prescribed burning would occur over a ten year period (approximately 2,830 acres per year). Prescribed burning would occur in the suitable area (Table II-6A) to manage the species composition of native plant communities. Some seeding (aerial application only) of native grass species and forb species would occur only where natural revegetation is not expected to be sufficient to provide adequate ground cover. On nonsuitable lands, vegetation treatment projects would include prescribed burning and the mechanical seeding (drill machine application) to non-native grass species and native forb species on 50% (3,750 acres) of the lands burned. Aerial seeding or natural regeneration of native species would occur on the remaining 50% (3,750 acres) of burned lands (Table II-6B).

Additional forage as a result of prescribed burning and land treatments would be available for livestock and wildlife outside the suitable area. Additional forage in the suitable area would be available for wildlife only.

TABLE-II-6A

PRESCRIBED BURNING PROJECTS IN SUITABLE AREA
BY ALTERNATIVE BY WSA[1]

WSA	Proposed Action	No Action		Canyonlands Wilderness	Wildlife Wilderness	All Wilderness
		Alternative	Subalternative			
OREGON						
3-195 (16-48B)	0	0	0	0	0	0
IDAHO						
3-195 (16-48B)	3,600	0	0	0	3,600	3,600
16-48C	2,700	0	0	0	2,700	7,050
16-49A	1,600	0	0	0	1,150	2,700
16-49D	200	0	0	0	200	350
16-52	850	0	0	0	500	850
16-53	11,850	0	0	0	7,050	11,850
NEVADA	0	0	0	0	0	0
TOTAL	20,800	0	0	0	15,200	26,400

[1] Prescribed burning only with some seeding to native grass species and forb species as needed on a case-by-case basis.

TABLE II-6B

LAND TREATMENT PROJECTS IN NONSUITABLE AREA
BY ALTERNATIVE BY WSA[1]

WSA	Proposed Action	No Action		Canyonlands Wilderness	Wildlife Wilderness	All Wilderness
		Alternative	Subalternative			
OREGON						
3-195 (16-48B)	1,900	2,900	2,900	2,900	2,500	0
IDAHO						
3-195 (16-48B)	0	3,600	3,600	3,600	0	0
16-48C	4,350	7,050	7,050	7,050	4,350	0
16-49A	1,100	2,700	2,700	2,700	1,150	0
16-49D	150	350	350	350	150	0
16-52	0	850	850	850	350	0
16-53	0	11,850	11,850	11,850	4,800	0
NEVADA	0	0	0	0	0	0
TOTAL	7,500	29,300	29,300	29,300	13,300	0

[1] Footnote on next page.

[1] Brush control and/or brush control and seeding for livestock forage production within those portions of the WSAs recommended nonsuitable for wilderness designation. Only prescribed burning, seeding to native species, and/or natural revegetation would be allowed in the Owyhee River Management Area.

3) Maintain existing range facilities on suitable and nonsuitable lands (Maps 3F through 3J). Existing developments within the WSAs are shown on Table II-7A and 7B. Controlled use of motorized vehicles would be permitted for facility maintenance.

Reservoir maintenance would occur once every twenty years using bulldozers in both suitable and nonsuitable areas. Bulldozers would access reservoir sites along existing vehicle routes where available and walked cross-country from the nearest road when vehicle routes are not present. Different routes would be used to access the reservoir sites for each maintenance cycle. Maintenance of reservoir sites would include recontouring dams and dirt piles into crescent or oval shapes resulting in reservoir water impoundments and pit areas with a rounded or oval appearance.

Within the suitable area, fence maintenance by vehicle would be permitted once each year at the beginning of the grazing season. Salting and all monitoring of livestock and rangeland facilities during the grazing season would be done from horseback. Emergency use of vehicles during mid-grazing seasons would be permitted on a case-by-case basis to repair damaged facilities or retrieve sick or injured animals.

TABLE II-7A

RANGELAND DEVELOPMENTS WITHIN, ADJACENT TO, OR ASSOCIATED WITH THE OWYHEE CANYONLANDS WSAs WHICH ARE USED FOR LIVESTOCK MANAGEMENT[1]

WSAs	Within and Adjacent to WSAs					Associated with non-WSA lands	
	Reservoirs	Developed Springs	Fences (miles) [2]	Corrals	Canals or Pipelines [3]	Reservoirs	Fences (miles)
OR-3-195	60	1 windmill	46.0	1	14.0	--	--
(ID-16-48B)	4	4	12.0	-	--	--	0
ID-16-48C	2	--	2.5	-	--	1	1.0
ID-16-49A	28	2	15.0	2	--	0	.8
ID-16-49D	3	--	0.3	-	--	--	--
ID-111-49E	7	--	0.8	1 historical	--	0	0
ID-16-52	--	--	1.5	1 metal bldg	--	0	0
ID-16-53	6	3 windmills	5.0	-	--	0	0
(NV-010-103A)	--	--	3.5	-	--	--	--
ID-010-106	1	--	--	-	--	--	--
TOTAL	105	10	86.6	5	14.0	1	1.8

[1] Footnotes on next page.

[1] Adjacent developments refers to those lying along WSA boundary roads and/or at the legal edge of the WSAs. Associated developments refer to those lying within or adjacent to the various blocks of affected non-WSA lands.
[2] Does not include gap fencing.
[3] With stock watering tanks.

In nonsuitable areas, fence maintenance by vehicle would be permitted throughout the grazing season. Salting and all monitoring of livestock and rangeland facilities during the grazing season would be done with motorized vehicles (including aircraft) or from horseback, except in canyon areas where access would be restricted to horseback.

TABLE II-7B

VEHICLE ROUTES WITHIN AND ASSOCIATED WITH THE OWYHEE CANYONLANDS WSAs USED FOR LIVESTOCK MANAGEMENT

	Miles			
	Within WSAs		On Affected Non-WSA Lands	
WSA	Cherrystem Roads	2-Wheel Tracks (Ways)	Roads	2-Wheel Tracks
OR-3-195 (ID-16-48B	20.3	82.5	-	-
ID-16-48C	0	0	-	-
ID-16-49A	8.5	11.5	0	0
ID-16-49D	1.3	1.0	-	-
ID-111-49E	1.3	1.0	0	0
ID-16-52	.5	0	0	0
ID-16-53 (NV-010-103A)	6.5	14.3	0	0
NV-010-106	0	4.0	-	-
TOTAL	38.4	114.3	0	0

4) Construct new rangeland facilities in both suitable and nonsuitable areas. New rangeland facilities would include ten reservoirs and nine miles of fenceline. Reservoirs would be constructed to blend with the surrounding landscape (low profile and rounded, or oval shape). Fences would be constructed to wildlife specifications to allow passage. The number of new facilities for each WSA under the Proposed Action is shown on Table II-8. Reservoir construction would be done with bulldozers and fence construction would be done with other motorized equipment. Access to construction sites would be along existing vehicle routes where available or cross-country.

TABLE II-8

PROPOSED PROJECT DEVELOPMENTS BY WSA

WSA	Proposed Action				No Action Alternative				No Action Subalternative				Canyonlands Wilderness				Wildlife Wilderness				All Wilderness			
	Reservoirs (No.)		Fences (miles)		Reservoirs (No.)		Fences (miles)		Reservoirs (No.)		Fences (miles)		Reservoirs (No.)		Fences (miles)		Reservoirs (No.)		Fences (miles)		Reservoirs (No.)		Fences (miles)	
[1]	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
OREGON																								
3-195	4	5	3	6	-	9	-	9	-	9	-	9	0	9	0	9	4	5	3	6	4	-	9	-
IDAHO																								
16-48B	0	0	0	0	-	3	-	0	-	3	-	0	0	3	0	0	0	0	0	0	0	-	0	-
16-48C	0	1	0	0	-	1	-	0	-	1	-	0	0	1	0	0	0	1	0	0	0	-	0	-
16-49A	0	0	0	0	-	0	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	-	0	-
16-49D	0	0	0	0	-	0	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	-	0	-
16-49E	0	0	0	0	-	0	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	-	0	-
16-52	0	0	0	0	-	0	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	-	0	-
16-53	0	0	0	0	-	0	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	-	0	-
							-																	
NEVADA																								
010-103A	0	0	-	0	-	0	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	-	0	-
010-106	0	0	-	0	-	0	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	-	0	-
TOTAL	4	6	3	6	-	13	-	9	-	13	-	9	0	13	0	9	4	6	3	6	4	-	9	-

[1] S = Suitable Area
NS = Nonsuitable Area
- = Not Applicable

5) Conduct research studies on bighorn sheep. Motorized vehicles and helicopters would be authorized for trapping and transplanting bighorn sheep by state wildlife agencies.

d. Utility Corridor Actions

Develop utility corridors along the El Paso Gas Pipeline right-of-way in Idaho and Nevada, and south and east of Twelve Mile, Nevada (Maps 3D and 3E).

El Paso Corridor

Ten (10) miles of this corridor's length would extend 1/8 mile into WSAs ID-16-49D, 111-49E and 16-52, and about 3/4 mile into WSA NV-010-103A along the El Paso Gas Pipeline. This corridor would be restricted to under ground facilities only. For the purpose of analysis in this EIS, it is projected that one additional buried pipeline would be placed adjacent to the western side of the existing pipeline at a distance of 50 feet.

The new pipeline in the El Paso Corridor would be constructed with bulldozers, backhoes and/or trenching machinery. The area of disturbance along the pipeline route would be 25 feet in width. The pipeline would have a regularly maintained dirt road along its west side to permit periodic inspection and/or maintenance. The road would be constructed at the time of pipe placement using materials, when necessary, from the pipe trenching. Disturbed areas along the east side of the pipeline would be rehabilitated (land recontoured to match terrain features and reseeded to native species).

At the Garat Gorge (WSA ID-16-49D) along the East Fork Owyhee River, the pipeline would be suspended across the river immediately adjacent to existing pipeline facilities. At the crossing of the South Fork Owyhee River in Nevada (between WSAs NV-010-103A and 106), the pipeline would be buried immediately adjacent to the existing pipeline. Existing pipeline access roads within the river canyons would be reconstructed (if necessary) and maintained at present construction standards.

Twelve Mile Corridor

This corridor would cross the southern portion of WSA NV-010-106. The five-mile wide corridor would extend from Twelve Mile, Nevada, southward beyond the boundary of WSA NV-010-106 and would allow above ground facilities. For the purpose of analysis in this EIS, it is projected that two overhead, high voltage powerline systems would be constructed. The powerlines would traverse the center of the corridor in a southwest-northeast direction for three miles and would lie one mile apart.

The powerline towers would be steel-frame structures about 150 feet high and 90 feet wide with 1,300 feet between towers. No roads would be built, but one vehicle way would develop along each of the powerlines during construction and persist through the passage of recreation vehicles and utility company maintenance vehicles. Large red or orange aircraft warning balls would be placed across the South Fork Owyhee River Canyon on both powerlines.

e. Mineral/Energy Exploration Actions

1) The area designated as wilderness would be closed to mineral entry under the General Mining Law of 1872 subject to valid existing rights. No valid existing rights are currently identified within the WSA complex nor are projected to be identified prior to wilderness designation. Lands lying outside the proposed wilderness area are recognized as having a low potential or favorability for mineral development. Consequently, no locatable mineral actions involving mining claims are projected under the Proposed Action.

2) Oil and gas leasing would not be permitted within the area designated as wilderness. Leasing could occur on nondesignated plateau lands, resulting in exploration activities including seismic tests and establishment of exploratory drilling sites.

Seismic testing would entail the use of large, specialized, three-axle vehicles which impact or "thump" the ground to obtain seismic readings from underlying rock strata. For the purpose of analysis in this EIS, it is projected that the vehicles would generally travel cross-country in a three to five mile wide grid pattern ("incidence of spacing") leaving behind wheel tracks consisting of crushed sagebrush plants.

For the purpose of analysis in this EIS, exploratory drilling is projected to occur at three locations (see Maps 3B through 3D):

WSA OR-3-195: T.38S., R.48E., Sec. 22, Oregon
WSA ID-16-48C: T.14S., R.5W., Sec. 33, Idaho
WSA ID-16-49A: T.14S., R.3W., Sec. 9, Idaho

Each of the exploration sites would have a 150-foot high drilling rig, several small metal buildings, a one acre mud pond, and stockpiled drilling materials. The total disturbed area at each site would be about 10 acres. Access to the drilling sites would be via a way (unconstructed two-wheel track) from the nearest WSA boundary road. The maximum length of any one of the three ways would be 1.3 miles. The topsoil at each site would be scraped off and stockpiled adjacent to the site for eventual rehabilitation (recontouring and seeding of disturbed areas to blend with the landscape) prior to the placement of any structures. The access way would also be rehabilitated at the close of operations. Each of the sites is projected to be active for a period of nine to twelve months. Rehabilitation of exploratory sites is projected to take three to five years. For the purpose of the analysis of this EIS (based upon the best available information), none of the sites are projected to become productive.

3) The area most favorable for geothermal resources is located within the proposed wilderness area. Wilderness designation would preclude geothermal leasing and exploration.

NO ACTION (NO WILDERNESS) ALTERNATIVE: Maps Series 4

Under the No Action (No Wilderness) Alternative, 446,067 acres of public land in the eight WSAs are recommended nonsuitable for wilderness designation. This alternative addresses management actions that would occur if none of the WSAs were designated wilderness.

Without wilderness designation, 297,530 acres of public lands within the WSAs would be managed as a congressionally designated wild river and as an administratively designated area of critical environmental concern (ACEC), a bighorn sheep habitat management area (HMA) and a special recreation management area (SRMA) as described below.

In 1984, Congress designated 20,800 acres of BLM lands along 65 miles of the Owyhee River (river sections upstream of Highway 95) in Oregon as a Wild River. The river and its main canyon would be managed according to the provisions of the Wild and Scenic Rivers Act (PL-542) and the Owyhee National Wild River Management Plan (1985).

The Bruneau and Owyhee Management Framework Plan (MFPs) designated a 175,000 acre ACEC within portions of all the Idaho WSAs. The ACEC includes the main canyons of the Owyhee River, East Fork Owyhee River and South Fork Owyhee River. It also includes the three major tributary canyons (Red Canyon, Deep Creek-Dickshooter Canyon and Battle Creek Canyon) and surrounding plateau of the Owyhee River system in Idaho currently being used by bighorn sheep or which is favorable for use. The ACEC was established to emphasize management for wildlife (bighorn sheep), naturalness and scenic values associated with the Owyhee Canyonlands and their surrounding plateau for a distance of approximately one mile.

The HMA established by the Southern Malheur MFP totals 88,000 acres within Oregon WSA OR-3-195. The HMA identifies those lands which are potential habitat for bighorn sheep. These lands include all plateau areas within one mile of the Owyhee River Canyon as well as the canyonlands and surrounding plateau of two major tributary streams (West Fork Little Owyhee River and Antelope Creek).

The SRMA identified by the Elko Resource Management Plan totals 13,730 acres and encompasses the canyons and some adjacent plateau of the South Fork Owyhee River in Nevada WSAs NV-010-103A and 010-106.

Though the names for the designations vary between the three states, management objectives are very similar. Therefore, for the purpose of this environmental impact statement, the HMA/ACEC/SRMA complex will be referred to as the OWYHEE RIVER MANAGEMENT AREA (ORMA).

TABLE II-9

NO ACTION (NO WILDERNESS) ALTERNATIVE ACRES
RECOMMENDED AS NONSUITABLE FOR WILDERNESS (BLM ACRES)

WSA	No nsuitable as Wilderness			
	OREGON	IDAHO	NEVADA	TOTAL
OR-3-195 (ID-16-48B)	190,700	33,700	--	224,400
ID-16-48C	--	24,600	--	24,600
ID-16-49A	--	70,160	--	70,160
ID-16-49D	--	9,990	--	9,990
ID-111-49E	--	31,540	--	31,540
ID-16-52	--	13,150	--	13,150
ID-16-53 (NV-010-103A)	--	42,510	7,842	50,352
NV-010-106	--	--	21,875	21,875
BLM TOTAL	190,700	225,650	29,717	446,067

Specific management actions in the WSAs are shown below:

a. Land Acquisition

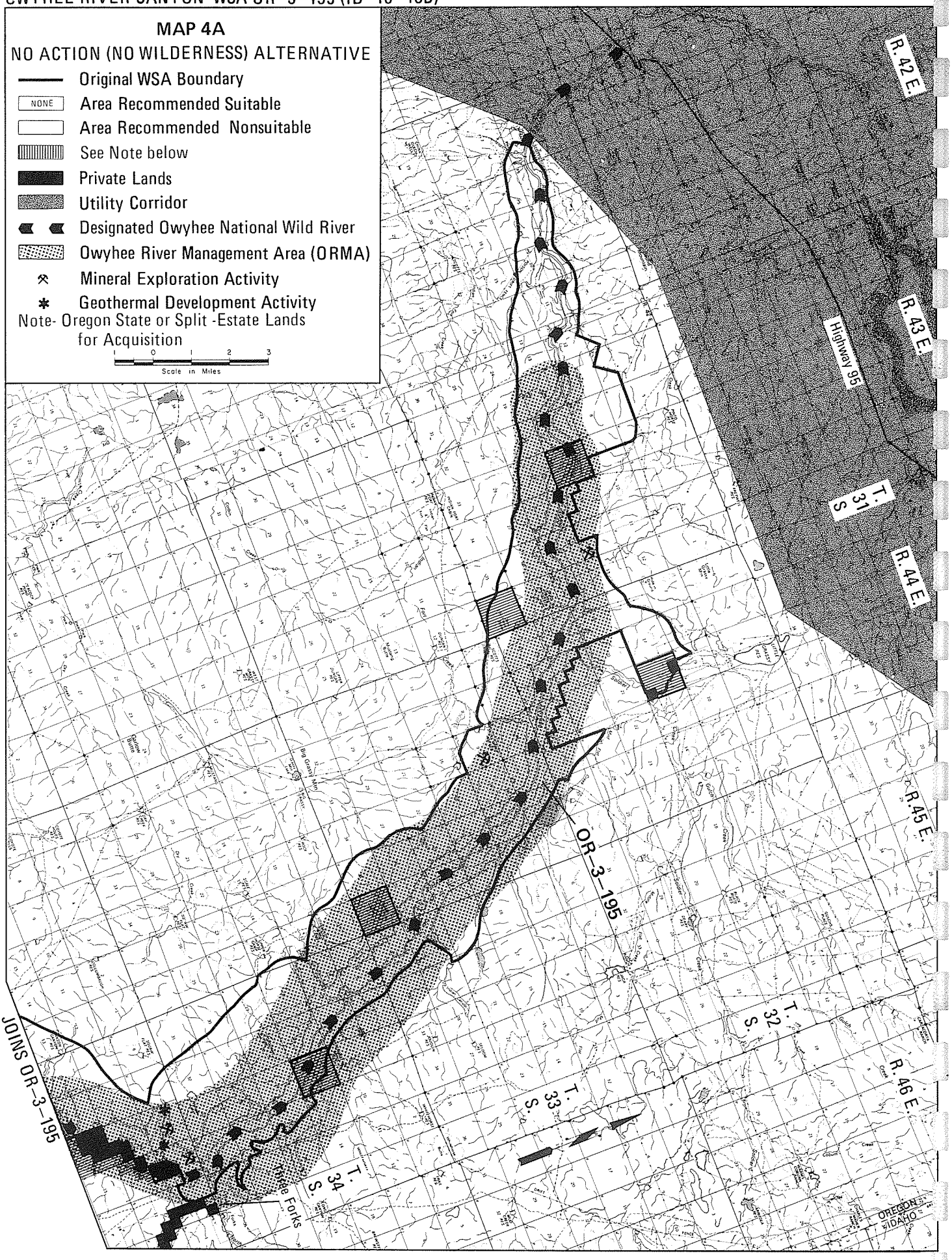
Continue negotiations with state land agencies to exchange lands and/or acquire subsurface mineral rights (Oregon split-estate lands). Negotiations with private land owners would also be initiated to acquire properties. The lands recommended for fee title acquisition or exchange and for mineral rights acquisition are shown on Table II-10. The lands, particularly those in the canyon areas, have the potential to be developed for recreation resort facilities, irrigated pasture lands, and/or mineral and energy resources.

b. Recreation Management Actions

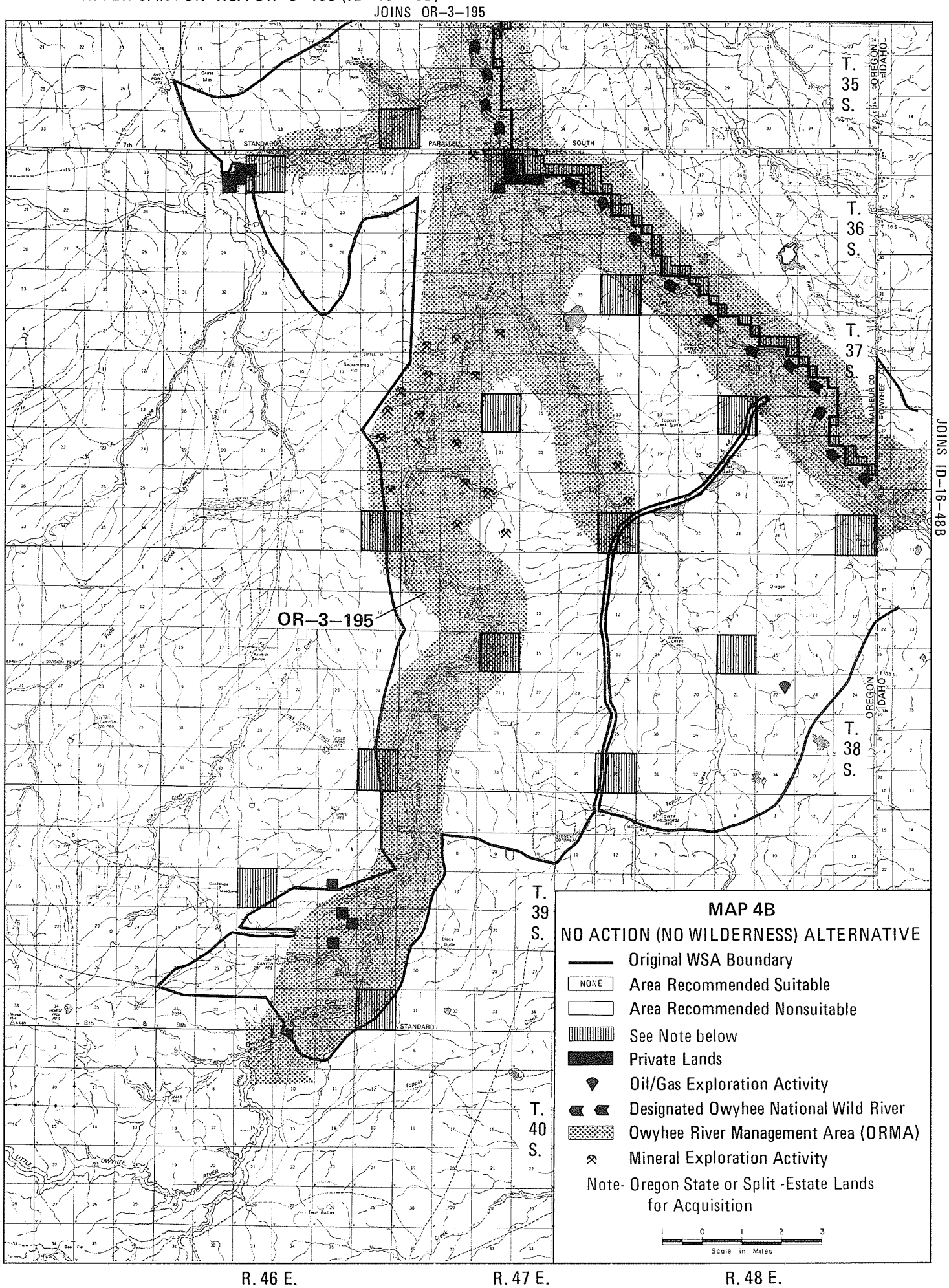
Management actions pertaining to WSA OR-3-195 are taken from the Owyhee National Wild River Management Plan.

1) Maintain the existing "45" dam (T.14S., R.5W., Sec. 25) to allow for boater passage and continued operation for irrigation purposes on the South Fork Owyhee River within Idaho. Dam maintenance would consist of replacing rock materials which become dislodged during annual high water flows. The dam site and nearby rock borrow pit are accessed by an established road.

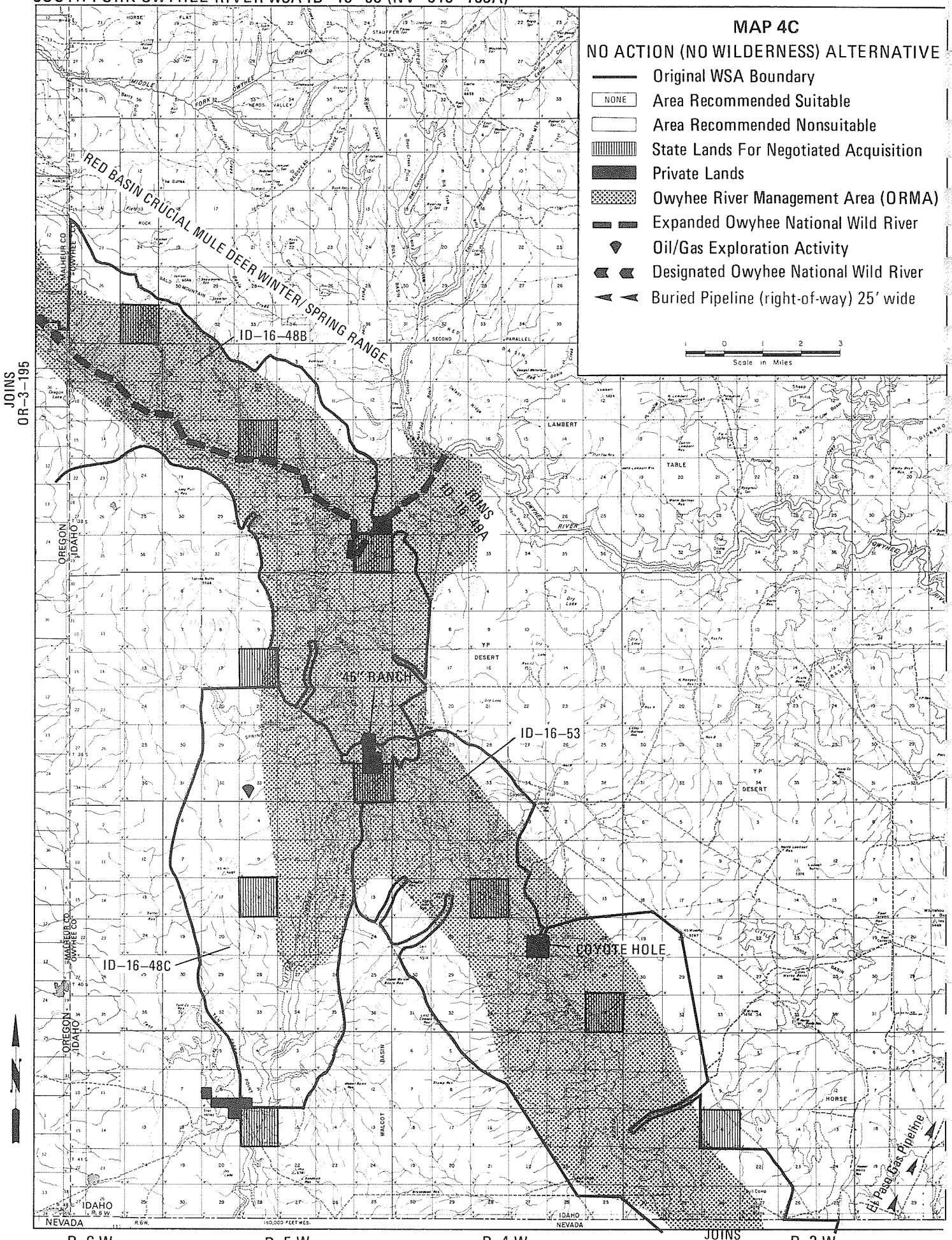
OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)

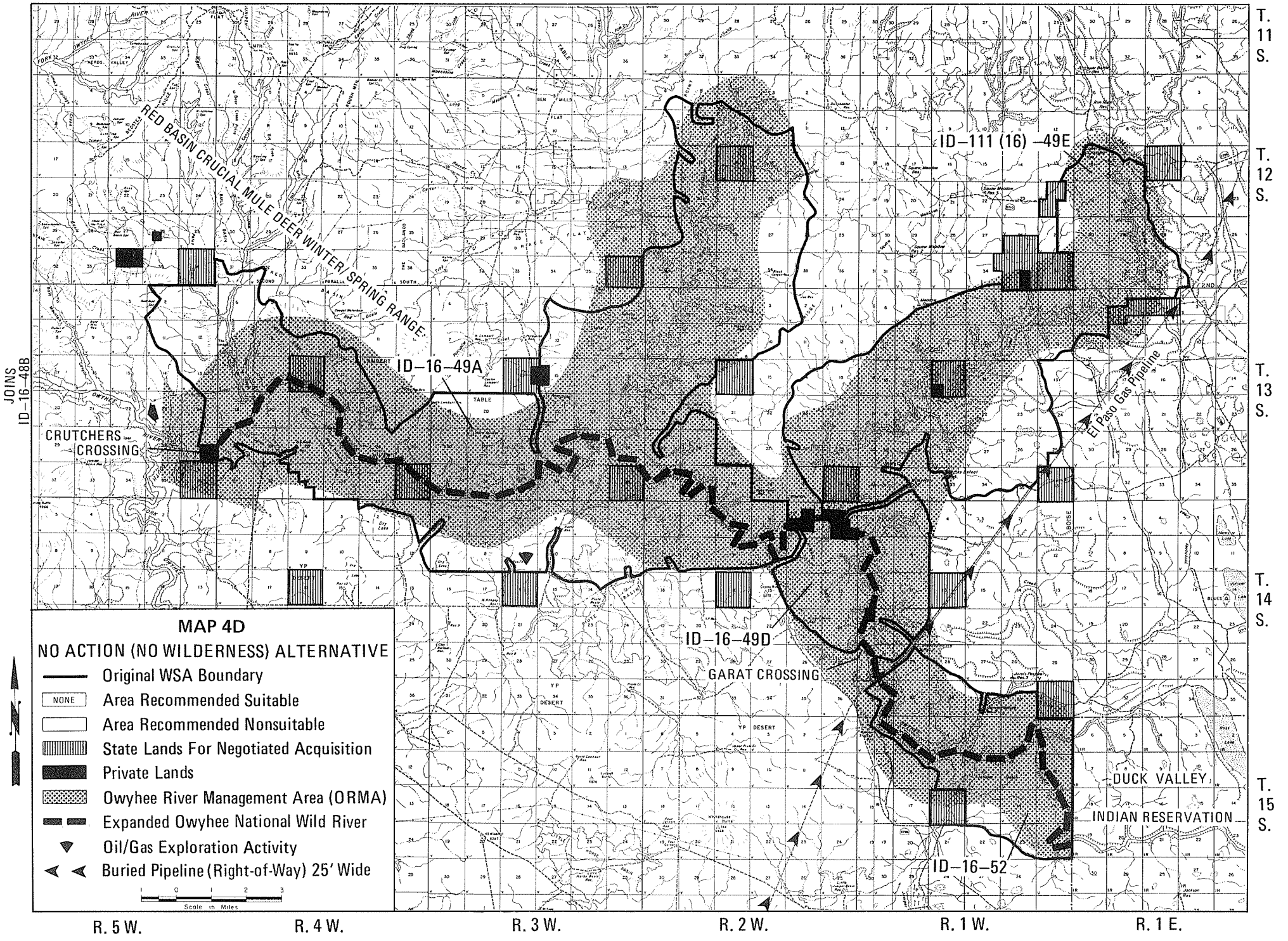


OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)
LITTLE OWYHEE RIVER WSA ID–16–48C
SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)




BATTLE CREEK WSA ID-111 (16) -49E
OWYHEE RIVER
DEEP CREEK WSA ID-16-49A
JUNIPER CREEK (UPPER OWYHEE RIVER) ID-16-52
RED BASIN CRUCIAL MULE DEER WINTER/SPRING RANGE
ID-111 (16) -49E
ID-16-49A
JOINS ID-16-48B
CRUTCHERS CROSSING
El Paso Gas Pipeline
ID-16-49D
GARAT CROSSING
DUCK VALLEY INDIAN RESERVATION
ID-16-52
T. 11 S.
T. 12 S.
T. 13 S.
T. 14 S.
T. 15 S.
R. 5 W.
R. 4 W.
R. 3 W.
R. 2 W.
R. 1 W.
R. 1 E.
MAP 4D
NO ACTION (NO WILDERNESS) ALTERNATIVE
Original WSA Boundary
NONE
Area Recommended Suitable
Area Recommended Nonsuitable
State Lands For Negotiated Acquisition
Private Lands
Owyhee River Management Area (ORMA)
Expanded Owyhee National Wild River
Oil/Gas Exploration Activity
Buried Pipeline (Right-of-Way) 25' Wide
0 1 2 3
Scale in Miles

OWYHEE CANYON WSA NV–010–106
SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)

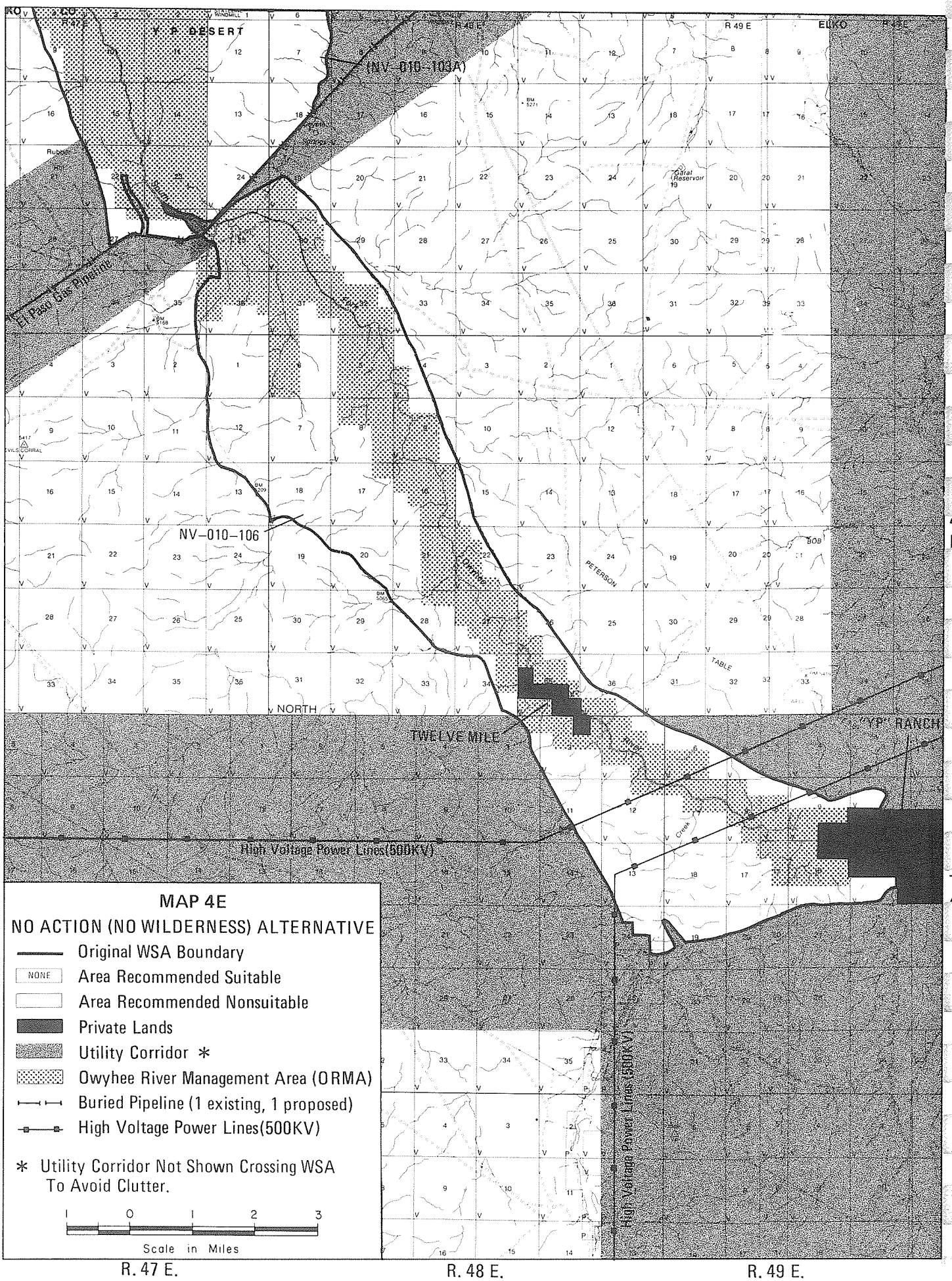


TABLE II-10

LANDS RECOMMENDED FOR ACQUISITION AND INCLUSION IN THE OWYHEE RIVER MANAGEMENT AREA UNDER THE NO ACTION (NO WILDERNESS) ALTERNATIVE[1]

WSA	Lands Acquisition							Total Mineral Rights Acquisition (split-estate)
	Acres of Inholding Lands			Acres of Adjacent or Interlocked Lands			Total Land Acquisition	
	STATE	PRIVATE	TOTAL	STATE	PRIVATE	TOTAL		
OR-3-195 (ID-16-48B)	1,280	---	1,280	3,280	920	4,200	5,480	5,820
ID-16-48C	--	---	--	190	---	190	190	---
ID-16-49A	2,560	---	2,560	680	160	840	3,400	---
ID-16-49D	--	40	40	--	200	200	240	---
ID-111-49E	1,240	40	1,280	1,040	200	1,240	2,520	---
ID-16-52	--	---	--	560	---	560	560	---
ID-16-53 (NV-010-103A)	1,280	160	1,440	370	---	370	1,810	---
NV-010-106	--	---	--	--	---	--	---	---
TOTAL	6,360	240	6,600	6,120	1,480	7,600	14,200	5,820

[1] A total of 27,020 acres of state and private lands associated with the WSAs are being considered for acquisition (exchange or purchase) regardless of wilderness designation. This table shows that portion of the acreage that would be included in the Owyhee River Management Area/ National Wild River proposal should the transfer of ownership occur.

Expansion of the congressionally designated Owyhee National Wild River into Idaho is projected under this alternative. About 20,800 acres along 65 miles of the Owyhee River in Oregon (WSA OR-3-195) were designated a wild river in 1985. The expanded Idaho designation would include another 21,120 acres along the Owyhee River and East Fork Owyhee River from the Oregon-Idaho border to the western boundary of the Duck Valley Indian Reservation (66 miles). The designation would include all the Owyhee River and East Fork Owyhee canyons (20,800 acres) within WSAs ID-16-48B, 16-49A, 16-49D and 16-52, plus a one mile section of non-WSA river canyon (320 acres) from Garat Crossing upstream to the El Paso Gas Pipeline Crossing lying between WSAs ID-16-49D and 16-52. This expansion is in conformance with the previous recommendation made by the National Park Service in its Owyhee River Wild and Scenic River Study Final Report - Environmental Statement of 1979. The total Oregon-Idaho wild river designation affecting the Owyhee Canyonlands WSA complex would be 41,920 acres along 131 miles of river. No expansion of the Owyhee National Wild River designation onto the South Fork Owyhee River of Idaho and Nevada is projected.

2) Maintain existing public river access roads, acquire recreation easements to provide public access through private property and construct recreation facilities (vault toilets and interpretive signs) at boating launch sites.

Existing public access roads would be maintained at present construction levels at the following locations:

Owyhee River -
(a) Garat Crossing (Pipeline Crossing, Idaho) between WSAs ID-16-49D and 16-52;
(b) Battle Creek confluence between WSAs ID-16-49A, 16-49D and 111-49E;
(c) Crutcher's Crossing between WSAs ID-16-48B and ID-16-49A;
(d) Three Forks adjacent to WSA OR-3-195.
South Fork Owyhee River -
(a) Pipeline Crossing, Nevada, between WSAs NV-010-103A and NV-010-106;
(b) "45" Ranch between WSAs ID-16-48B, ID-16-48C and ID-16-53;
(c) Coyote Hole in WSA ID-16-53.

Acquire recreation easements at the "YP" Ranch at the southern tip of WSA NV-010-106, and at the "45" Ranch between WSA ID-16-48B and ID-16-53 and maintain roads to provide public boating access into the Owyhee River Management Area. Recreationalists are currently obtaining permission from the private property owners at the time they launch their trips.

Acquire a recreation easement and upgrade the road access into WSA NV-010-106 at Twelve Mile. The upgraded road would provide additional public access to the river. Construction standards would not exceed those at other major Owyhee River access points. The new road would alleviate projected recreation use pressure on the private lands of the "YP" Ranch rather than encourage additional use of the river.

Construct vault toilets on BLM lands at the Garat Crossing in WSA ID-16-49D and at Three Forks in WSA OR-3-195. With the Twelve Mile, "YP" Ranch and "45" Ranch easements, vault toilets would be placed on private property within the South Fork Owyhee River Canyon. Each of the toilet sites would also have one interpretive/informational kiosk (small, roofed, sign structure) and registration box.

3) All vehicle routes (interior or cherrystem roads and ways) to the river and across the plateau within and adjacent to the WSAs would remain open to general public recreational use (Table II-3). Vehicle travel within the boundaries of the Owyhee River Management Area would be limited to existing roads and ways (these roads to be designated or signed). Off-road vehicle (ORV) travel would not be allowed except outside the boundaries of the Owyhee River Management Area and the adjacent Red Basin Crucial Mule Deer Winter/Spring Range lying within and north of WSA ID-16-49A and ID-16-48B.

4) Stabilize historic cultural sites (stone and wood buildings) on BLM lands (Maps 3F through 3J). These sites include:

a) WSA OR-3-195(ID-16-48B)
State line: T.37S., R.48E., Sec. 23, Oregon
Juniper Basin: T.14S., R.5W., Sec. 28, Idaho

b) WSA ID-16-53
Bull Camp: T.16S., R.4W., Sec. 13, Idaho

Coordinate with state historic preservation offices and county historical societies to stabilize historic cultural sites on private inholdings and adjoining lands which are recommended for acquisition/exchange or easement purchase under the Wild River (No Wilderness) Alternative (Maps 3F through 3J). These sites include:

a) Five Bar: T.36S., R.47E., Secs. 15 and 16, Oregon
b) Crutcher's Crossing: T.13S., R.5W., Sec. 25, Idaho
c) Battle Creek confluence: T.14S., R.2W., Secs. 1 and 2, Idaho
d) Jarvis Creek confluence: T.14S., R.1W., Sec. 19, Idaho
e) Coyote Hole: T.15S., R.4W., Sec. 22, Idaho
f) Twelve Mile: T.46N., R.48E., Sec. 35, Nevada

Reconstruction of roofs on otherwise complete structures would be the primary stabilization measure. Stone structures with only portions of walls standing would be stabilized using compatible mortars where appropriate. Wood structures that are substantially intact (roofs in place) would be stabilized using applications of wood preservative solutions or replacement of rotted timbers, with sod roofing materials being replaced. Wood structures in collapsed, rotted or otherwise poor condition would be allowed to deteriorate naturally since there are no effective stabilization measures other than complete reconstruction. No cement foundations or other soil disturbing activities would occur around buildings. Access would be by vehicle along cherrystem roads or by helicopter.

5) Establish a carrying capacity for river running activities on the Owyhee River system at 182 trips per year with a total of 30,030 user days per year (Table II-4A and 4B). Establish no carrying capacity for backpacking/ horsepacking, hunting or other activities until such time as use levels warrant.

It is anticipated that river running would reach 37% (11,000 user days) of the carrying capacity in 20 years while other recreation activities would reach a total of 4,400 user days.

c. Rangeland Management (Vegetation, Livestock and Wildlife) Actions

Continue livestock grazing, and develop allotment management plans (AMPs) and grazing decisions/ agreements for 24 allotments (Maps 3F through 3J) which would allow the following:

1) Increase grazing use as forage becomes available. Livestock and wildlife use would be limited to an overall average of less than 50% utilization of available forage. A monitoring program would be used to ensure that the utilization level is not exceeded. Livestock use is expected to increase to 43,839 AUMs within the WSAs over 20 years from a current use of 29,020 AUMs per annum. Existing and projected livestock use under the No Action (No Wilderness) Alternative is shown on Table II-5A and 5B.

Livestock forage allocations of available forage (not to exceed 50% utilization) on the plateau within the WSAs would range between 95% and 97% with the remaining 3% to 5% allocated to wildlife. All forage (100%) would be allocated to wildlife in the canyonlands except in WSAs ID-16-48B, ID-16-48C, ID-16-53, NV-010-103A and NV-010-106 (Table II-5C).

2) Conduct prescribed burning and seeding projects on 29,300 acres on the plateau within the WSAs (Table II-6B for acreages specific to each WSA). Prescribed burning would occur over a ten year period (approximately 2,930 acres per year). Prescribed burning would occur on 15,600 acres within the Owyhee River Management Area to manage the species composition of native plant communities. Aerial seeding of native grass species and forb species would occur only where natural revegetation is not expected to be sufficient to provide adequate ground cover. On non-ORMA lands, vegetation treatment projects on 13,700 acres would include prescribed burning and the seeding to both native and non-native grass species and native forb species. Non-native seed applications on 50% (6,850 acres) of the burned lands would occur with drill machinery, with the remaining 50% (6,850 acres) having aerial seeding or the natural regeneration of native species.

3) Maintain existing range facilities (Maps 3F through 3J). Existing developments within the WSAs are shown on Table II-7A and 7B. Motorized vehicles would be used for facility maintenance.

Reservoir maintenance would occur once every twenty years using bulldozers. Bulldozers would access reservoir sites along existing vehicle routes where available and walked cross-country from the nearest road when vehicle routes are not present. Different routes would be used to access reservoir sites for each maintenance cycle. Maintenance of reservoir sites would include recontouring dams and dirt piles into crescent or oval shapes resulting in reservoir water impoundments and pit areas with a rounded or oval appearance.

Fence maintenance by vehicle would be permitted throughout the grazing season. Salting and all monitoring of livestock and rangeland facilities during the grazing season would be done with motor vehicles (including aircraft) or from horseback, except in canyon areas where access would be restricted to horseback.

4) Construct new rangeland facilities. New rangeland facilities would include 13 reservoirs and nine miles of fenceline. Reservoirs would be constructed to blend with the surrounding landscape (low profile and rounded or oval shape). Fences would be constructed to wildlife specifications to allow passage. The number of new facilities for each WSA under the No Action

(No Wilderness) Alternative is shown on Table II-8. Reservoir construction would be done with bulldozers and fence construction would be done with other motorized equipment. Access to construction sites would be along existing vehicle routes where available or cross country.

5) Conduct research studies on bighorn sheep. Motorized vehicles and helicopters would be authorized for trapping and transplanting bighorn sheep by state wildlife agencies.

d. Utility Corridor Actions

Develop utility corridors along the El Paso Gas Pipeline right-of-way in Nevada, and south and east of Twelve Mile, Nevada (Maps 4D and 4E).

El Paso Corridor

Five and one-half (5.5) miles of this corridor's length would extend about 3/4 mile into WSA NV-010-103A along the El Paso Gas Pipeline within Nevada. This corridor would be restricted to under ground facilities only. For the purpose of analysis in this EIS, it is projected that one additional buried pipeline would be placed adjacent to the western side of the existing pipeline in Nevada at a distance of 50 feet. The pipeline would not extend into Idaho between or adjacent to WSAs ID-16-49D, 111-49E and 16-52. The existing 25-foot wide El Paso Gas Pipeline right-of-way in Idaho would be maintained along 4.5 miles of WSA boundary. New buried pipelines in Idaho would be routed to the east of the entire Owyhee Canyonlands WSA complex.

The new pipeline in the El Paso Corridor in Nevada would be constructed with bulldozers, backhoes and/or trenching machinery. The area of disturbance along the pipeline route would be 25 feet in width. The pipeline would have a regularly maintained dirt road along its west side to permit periodic inspection and/or maintenance. The road would be constructed at the time of pipe placement using materials, when necessary, from the pipe trenching. Disturbed areas along the east side of the pipeline would be rehabilitated (land recontoured to match terrain features and reseeded to native species).

At the crossing of the South Fork Owyhee River between WSA NV-010-103A and 106 the pipeline would be buried immediately adjacent to the existing pipeline. Existing pipeline access roads within the river canyons would be reconstructed (if necessary) and maintained at present construction standards.

Twelve Mile Corridor

This corridor would cross the southern portion of WSA NV-010-106. The five mile wide corridor would extend from Twelve Mile, Nevada, southward beyond the boundary of WSA NV-010-106 and would allow above ground facilities. For the purpose of analysis in this EIS, it is projected that two overhead, high voltage powerline systems would be constructed. The powerlines would traverse the center of the corridor in a southwest-northeast direction for three miles and would lie one mile apart.

The powerline towers would be steel-frame structures about 150 feet high, and 90 feet wide with 1,300 feet between towers. No roads would be built, but one vehicle way would develop along each of the powerlines during construction and persist through the passage of recreation vehicles and utility company maintenance vehicles. Large red or orange aircraft warning balls would be placed across the South Fork Owyhee River Canyon on both powerlines.

e. Mineral/Energy Exploration Actions

1) The Owyhee National Wild River area in Oregon and Idaho would be withdrawn from mineral entry under the General Mining Law of 1872. Outside of this area, no valid existing rights for mineral deposits are currently identified within the WSA complex. Lands in much of the WSAs are recognized as having a low potential for mineral development. Moderate mineral potential has been identified within and adjacent to the canyonlands of WSA OR-3-195 for silver, gold, and mercury. Based upon this moderate potential, mineral exploration activity is projected to occur at the following locations (Maps 4A and 4B):

Exploration for silver is projected in T.37S., R.46E., Secs. 12, 13, 24 and 25, and in T.37S., R.47E., Secs. 5 through 8, 18 through 20, 28, 29, 32 and 33. Less than one acre of disturbance (earth movement with bulldozers and/or backhoes) in each of these sections is projected to occur.

Exploration for gold is projected in T.32S., R.42E., Sec. 14 and in T.36S., R.47E., Sec. 8. Less than one acre of surface disturbance in each of these sections is projected to occur.

Exploration for mercury is projected in T.33S., R.44E., Sec. 9; T.37S., R.47E., Secs. 4, 24 and 25; T.35S., R.45E., Secs. 3 and 4. Less than one acre of surface disturbance in each of these sections is projected to occur.

No road construction to exploration sites (prospects) would be permitted and bulldozers and other motorized vehicles would travel cross-country. Exploration pits would be rehabilitated (recontoured and seeded), as well as any vehicle ways created while gaining access to prospect locations. Exploration is not projected to uncover mineral deposits of commercial worth.

2) Leasing for oil and gas resources would continue, resulting in exploration activities including seismic tests and establishment of exploratory drilling sites on the plateau. Drilling sites could not be established within the Owyhee River Management Area because of leasing stipulations which prohibit surface occupancy.

Seismic testing would entail the use of large, specialized, three-axle vehicles which impact or "thump" the ground to obtain seismic readings from underlying rock strata. For the purpose of analysis in this EIS, it is projected that the vehicles would generally travel cross-country in a three to five mile wide grid pattern leaving behind wheel tracks consisting of crushed sagebrush plants.

For the purpose of analysis in this EIS, exploratory drilling is projected to occur at three locations (Maps 4B through 4D):

WSA OR-3-195: T.38S., R.48E., Sec. 22, Oregon
WSA ID-16-48C: T.14S., R.5W., Sec. 33, Idaho
WSA ID-16-49A: T.14S., R.3W., Sec. 9, Idaho

Each of the exploration sites would have a 150-foot high drilling rig, several small metal buildings, a one acre mud pond, and stockpiled drilling materials. The total disturbed area at each site would be about 10 acres. Access to the drilling sites would be via a way (unconstructed two-wheel track) from the nearest WSA boundary road. The maximum length of any one of the three ways would be 1.3 miles. The topsoil at each site would be scraped off and stockpiled adjacent to the site for eventual rehabilitation (recontouring and seeding of disturbed areas to blend with the landscape) prior to the placement of any structures. The access way would also be rehabilitated at the close of operations. Each of the sites is projected to be active for a period of nine to twelve months. Rehabilitation of exploratory sites is projected to take three to five years. For the purpose of the analysis of this EIS (based upon the best available information), none of the sites are projected to become productive.

3) The entire WSA OR-3-195 is moderately favorable for geothermal resources with the most favorable area for exploration within the Owyhee River Canyon near Three Forks, Oregon: T.35S., R.45E., Sections 3 and 4, just outside of the Owyhee National Wild River designation. It is projected that less than five acres would be disturbed (earth moving activity with bulldozers, backhoes, and mobile well drilling rigs) as a result of research and/or exploration. No development is projected at this time.

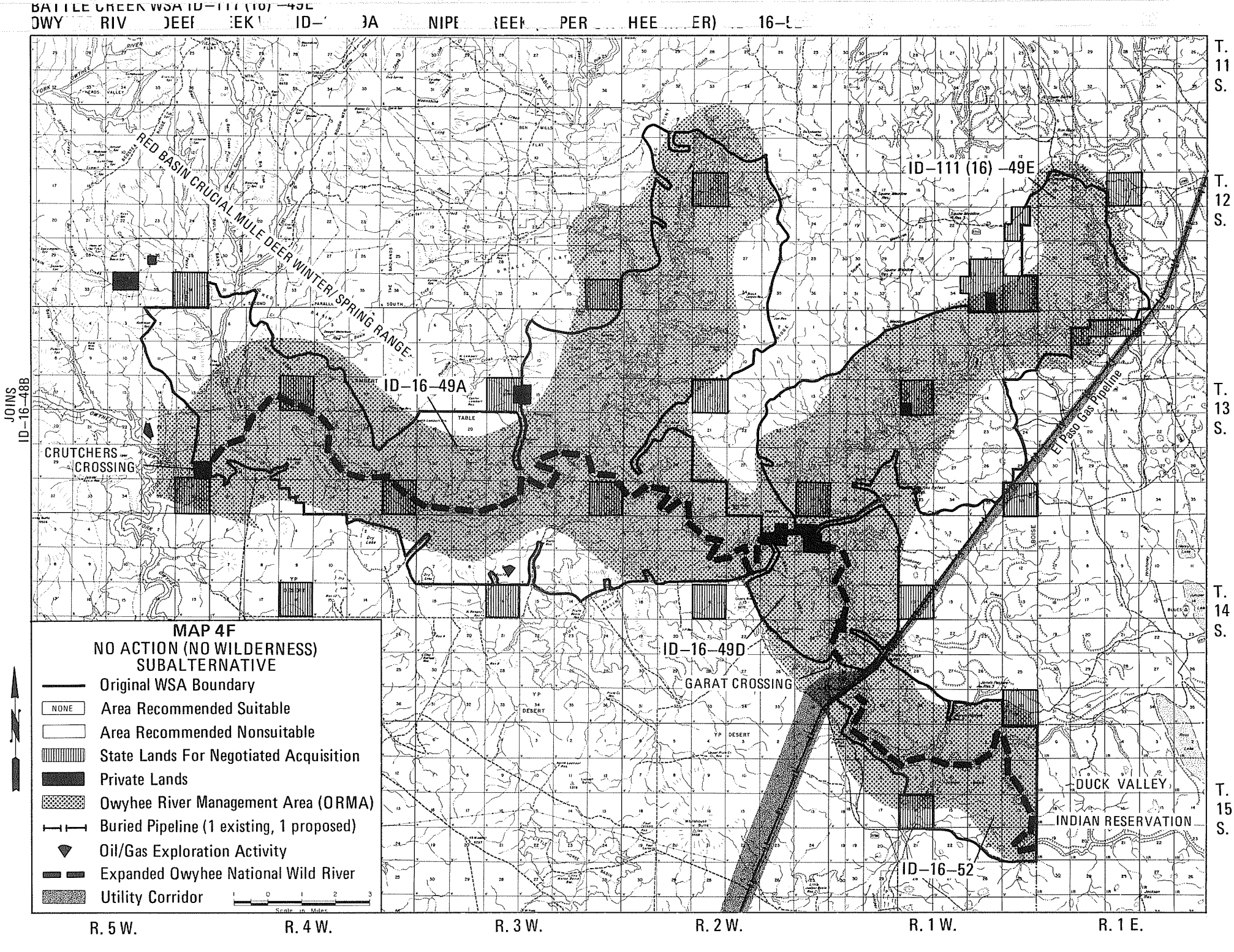
NO ACTION (NO WILDERNESS) SUBALTERNATIVE: Map 4F

Under the No Action (No Wilderness) Subalternative, 446,067 acres of public land in the eight WSAs are recommended nonsuitable for wilderness designation. As under the No Action (No Wilderness) Alternative, 297,530 acres within the WSAs would continue to be managed under the Owyhee River Management Area (ORMA) designations. The Owyhee River and East Fork Owyhee River in Oregon and Idaho would be managed as a congressionally designated wild river. The South Fork Owyhee River in Idaho and Nevada would not be designated a wild river, but would remain under the management guidance of the ORMA.

Management actions for the No Action (No Wilderness) Subalternative would be identical to those described under the No Action (No Wilderness) Alternative except for development of underground utilities along the El Paso Gas Pipeline adjacent to or between WSAs ID-16-49D, 111-49E and 16-52 in Idaho.

Under the Subalternative, the utility corridor along the El Paso Gas Pipeline in Nevada would be extended into Idaho. Four and one half (4 1/2) miles of the extended corridor's length would occupy 1/8 mile of land on each side of the existing pipeline right-of-way within WSAs ID-16-49D, 111-49E and 16-52. Only new underground utilities would be permitted within the corridor in both Idaho and Nevada. Utility corridor actions (El Paso and Twelve Mile Utility Corridor) for Nevada would be as described under the No Action (No Wilderness) Alternative.

With the presence of the El Paso Utility Corridor near the Garat Crossing, the entire 66 miles of the Owyhee River and East Fork Owyhee River in Idaho would not be managed as a congressionally designated wild river. Only 65 miles would be managed in conjunction within the already designated 65 miles of the Owyhee National Wild River in Oregon. One mile of the East Fork Owyhee River canyon between WSAs ID-16-49D and 16-52 would not be included in the wild river designation in order to accommodate additional underground utilities in the El Paso Utility Corridor.



BATTLE CREEK WSA ID-111 (16) -49E
OWY RIV DEEF EK ID- 9A NIPE REEK PER HEE ER) 16-
JOINS ID-16-48B
RED BASIN CRUCIAL MULE DEER WINTER/SPRING RANGE
ID-111 (16) -49E
ID-16-49A
CRUTCHERS CROSSING
El Paso Gas Pipeline
ID-16-49D
GARAT CROSSING
DUCK VALLEY INDIAN RESERVATION
ID-16-52
T. 11 S.
T. 12 S.
T. 13 S.
T. 14 S.
T. 15 S.
R. 5 W.
R. 4 W.
R. 3 W.
R. 2 W.
R. 1 W.
R. 1 E.
MAP 4F
NO ACTION (NO WILDERNESS) SUBALTERNATIVE
Original WSA Boundary
NONE
Area Recommended Suitable
Area Recommended Nonsuitable
State Lands For Negotiated Acquisition
Private Lands
Owyhee River Management Area (ORMA)
Buried Pipeline (1 existing, 1 proposed)
Oil/Gas Exploration Activity
Expanded Owyhee National Wild River
Utility Corridor
Scale in Miles

CANYONLANDS WILDERNESS ALTERNATIVE: Maps Series 5

Under this alternative, 88,900 acres of public land within the canyons of the eight WSAs are recommended suitable for wilderness designation. Management of the canyonlands would be the same as that described under the Proposed Action.

There are 357,167 acres which are recommended nonsuitable for wilderness. Of this nonsuitable acreage, 10,430 acres of canyons and plateau along the South Fork Owyhee River in Nevada and about 196,800 acres of the plateau in Oregon and Idaho would be managed under the Owyhee River Management Area designations as described under the Wild River (No Wilderness) Alternative.

The acreage recommendations by WSA for this alternative would be as follows:

TABLE II-11

CANYONLANDS WILDERNESS ALTERNATIVE
ACRES RECOMMENDED SUITABLE/NONSUITABLE AS WILDERNESS (BLM ACRES)[1]

WSA	Nonsuitable as Wilderness				Suitable as Wilderness			
	OREGON	IDAHO	NEVADA	TOTAL	OREGON	IDAHO	NEVADA	TOTAL
OR-3-195 (ID-16-48B)	155,800	21,700	--	177,500	34,900	12,000	--	46,900
ID-16-48C	---	18,600	--	18,600	--	6,000	--	6,000
ID-16-49A	---	52,160	--	52,160	--	18,000	--	18,000
ID-16-49D	---	7,990	--	7,990	--	2,000	--	2,000
ID-111-49E	---	29,340	--	29,340	--	2,200	--	2,200
ID-16-52	---	9,950	--	9,950	--	3,200	--	3,200
ID-16-53 (NV-010-103A)	---	35,210	6,142	41,352	--	7,300	1,700	9,000
NV-010-106 __	---	---	20,275	20,275	---	---	1,600	1,600
BLM TOTAL	155,800	174,950	26,417	357,167	34,900	50,700	3,300	88,900

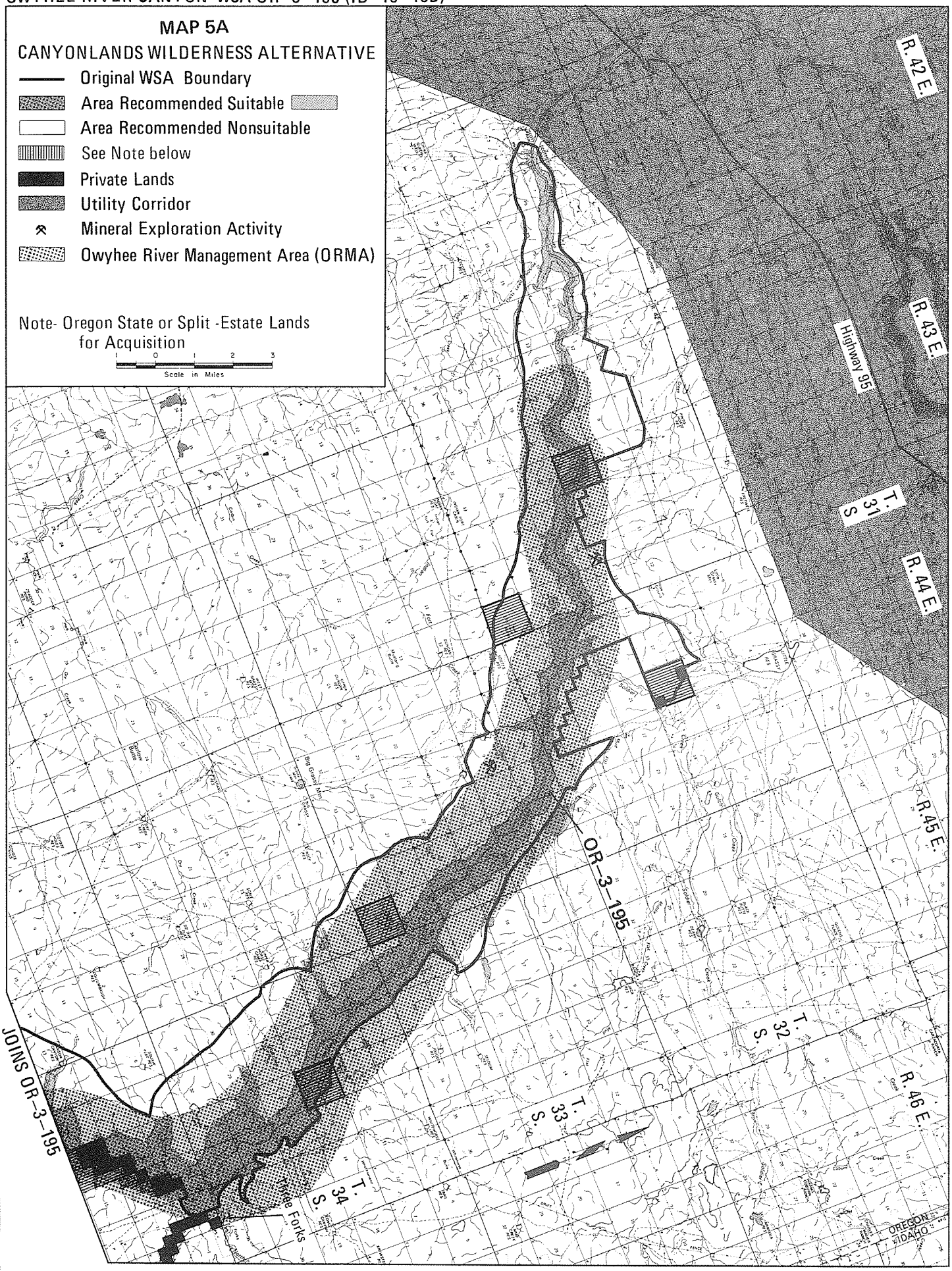
[1] An additional 7,530 acres of non-BLM lands would be included in the suitable area following acquisition (Table II-12A).

Specific management actions in the WSAs are shown below:

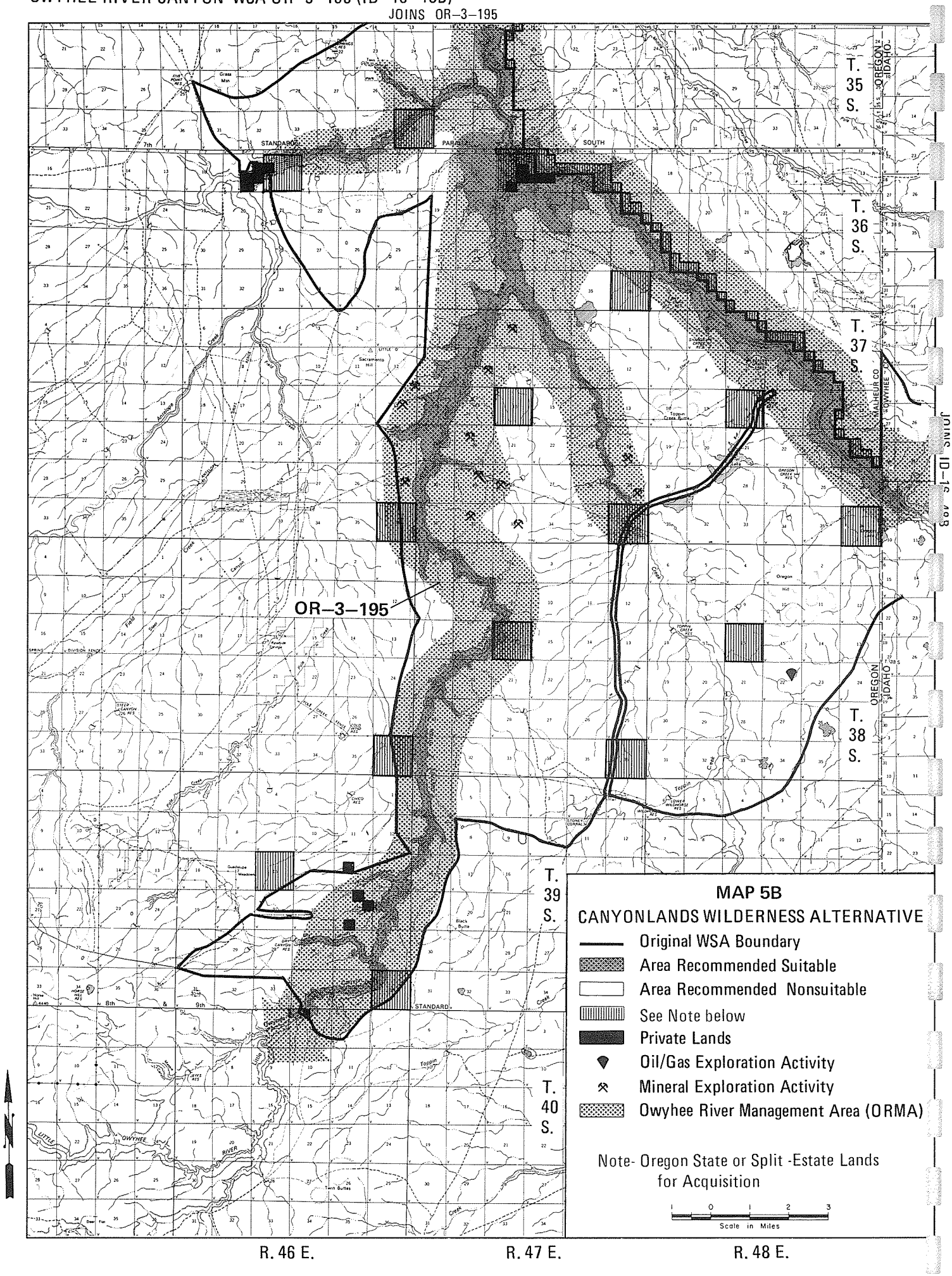
a. Land Acquisition

Continue negotiations with state land agencies to exchange lands and/or acquire subsurface mineral rights (Oregon split-estate lands). Negotiations with private land owners would also be initiated to acquire properties. The lands recommended for fee title acquisition or exchange and for mineral rights acquisition are shown on Tables II-12A and 12B. These lands, particularly those in the canyon areas, have the potential to be developed for recreation resort facilities, irrigated pasture lands, and/or mineral and energy resources.

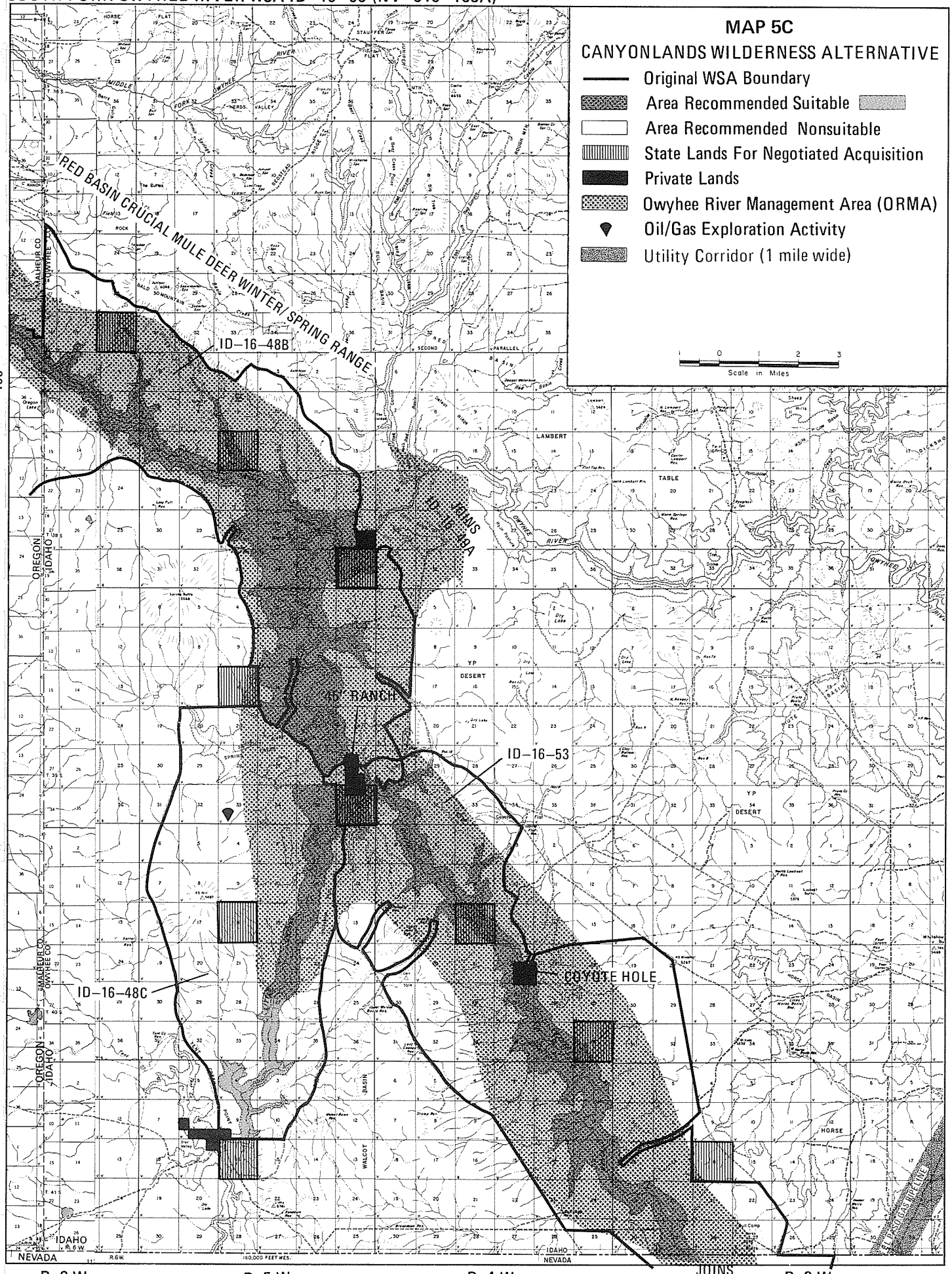
OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



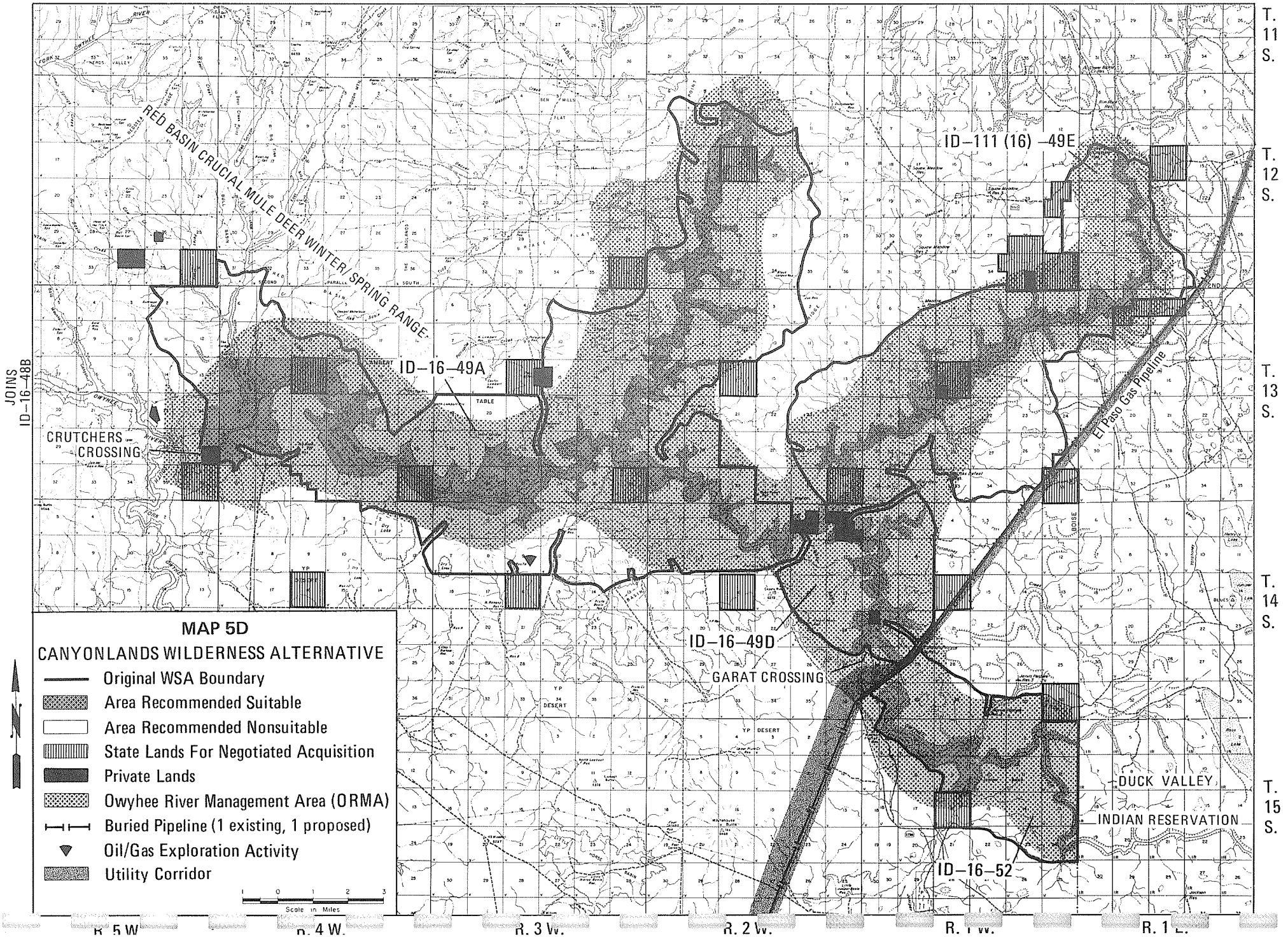
OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)
LITTLE OWYHEE RIVER WSA ID–16–48C
SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)



YATAHONEY CREEK WSA ID–16–49D
BATTLE CREEK WSA ID–111 (16) –49E
OWYHEE RIVER–DEEP CREEK WSA ID–16–49A JUNIPER CREEK (UPPER OWYHEE RIVER) ID–16–52



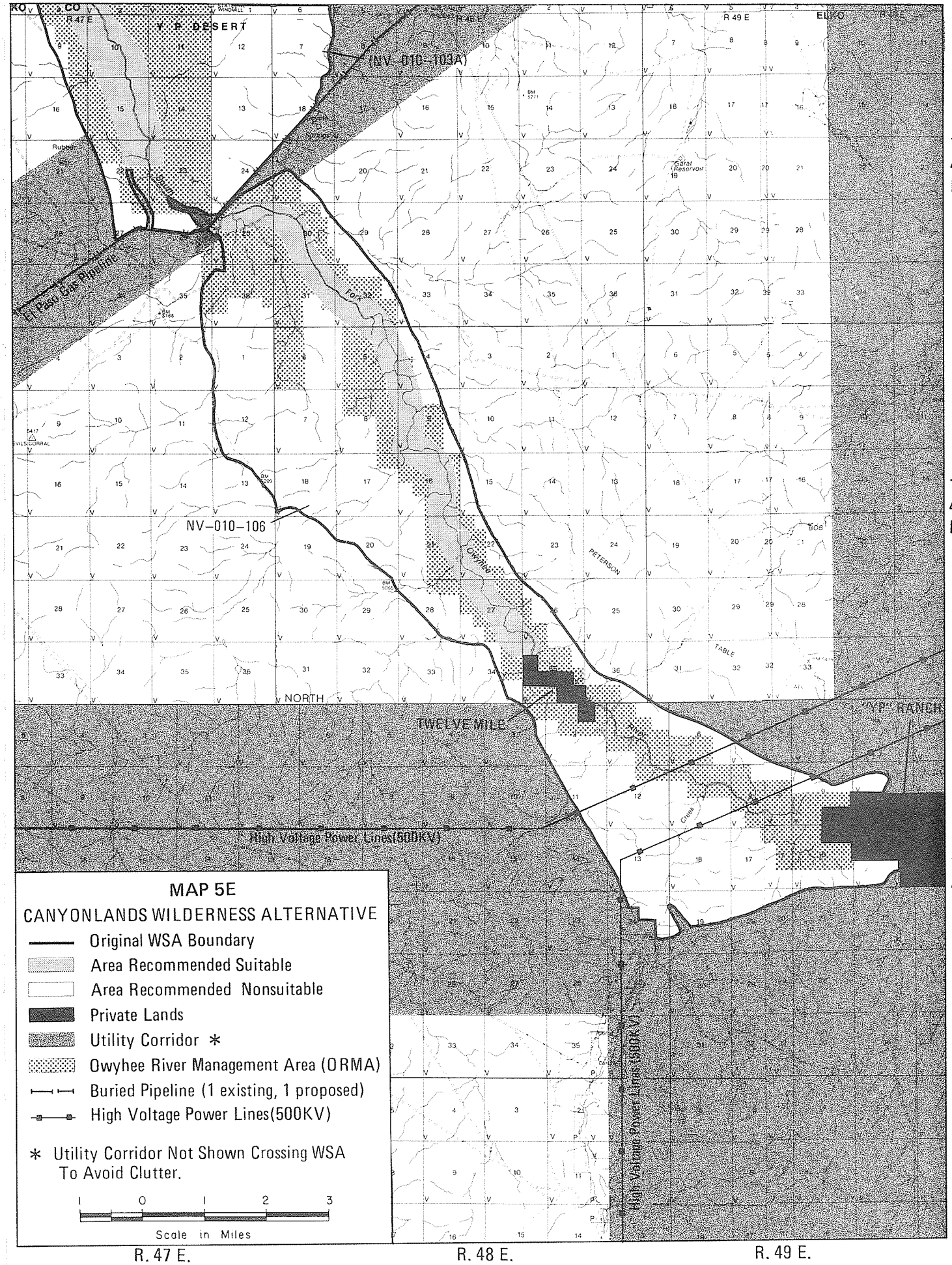
MAP 5D

CANYONLANDS WILDERNESS ALTERNATIVE

- Original WSA Boundary
- Area Recommended Suitable
- Area Recommended Nonsuitable
- State Lands For Negotiated Acquisition
- Private Lands
- Owyhee River Management Area (ORMA)
- Buried Pipeline (1 existing, 1 proposed)
- Oil/Gas Exploration Activity
- Utility Corridor

Scale in Miles

OWYHEE CANYON WSA NV–010–106
SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)



MAP 5E

CANYONLANDS WILDERNESS ALTERNATIVE

- Original WSA Boundary
- Area Recommended Suitable
- Area Recommended Nonsuitable
- Private Lands
- Utility Corridor *
- Owyhee River Management Area (ORMA)
- Buried Pipeline (1 existing, 1 proposed)
- High Voltage Power Lines(500KV)

* Utility Corridor Not Shown Crossing WSA To Avoid Clutter.

1 0 1 2 3

Scale in Miles

R. 47 E. R. 48 E. R. 49 E.

TABLE II-12A

LANDS RECOMMENDED FOR ACQUISITION AND INCLUSION IN THE SUITABLE BLM WILDERNESS RECOMMENDATION UNDER THE CANYONLANDS WILDERNESS ALTERNATIVE[1]

WSA	Lands Acquisition							Total Mineral Rights Acquisition (split-estate)
	Acres of Inholding Lands			Acres of Adjacent or Interlocked Lands			Total Land Acquisition	
	STATE	PRIVATE	TOTAL	STATE	PRIVATE	TOTAL		
OR-3-195 (ID-16-48B)	160	---	160	3,040	920	3,960	4,120	2,010
ID-16-48C	---	---	--	190	---	190	190	---
ID-16-49A	1,240	---	1,240	---	160	160	1,400	---
ID-16-49D	---	40	40	---	200	200	240	---
ID-111-49E	480	40	520	40	200	240	760	---
ID-16-52	---	---	--	---	---	---	---	---
ID-16-53 (NV-010-103A)	600	160	760	60	---	60	820	---
NV-010-106	---	---	--	---	---	---	---	---
TOTAL	2,480	240	2,720	3,330	1,480	4,810	7,530	1,450

[1] A total of 27,020 acres of state and private lands associated with the WSAs are being considered for acquisition (exchange or purchase) regardless of wilderness designation. This table shows that portion of the acreage which would be included in the suitable area should the transfer of ownership occur.

b. Recreation Management Actions

Management actions pertaining to WSA OR-3-195 are taken from the Owyhee National Wild River Management Plan.

1) Maintain the existing "45" dam (T.14S., R.5W., Sec. 25) to allow for boater passage and continued operation for irrigation purposes on the South Fork Owyhee River within Idaho. Dam maintenance would consist of replacing rock materials which become dislodged during annual high water flows. The dam site and nearby rock borrow pit are accessed by an established road.

TABLE II-12B

LANDS RECOMMENDED FOR ACQUISITION AND INCLUSION IN THE OWYHEE RIVER MANAGEMENT AREA UNDER THE CANYONLANDS WILDERNESS ALTERNATIVE[1]

WSA	Lands Acquisition							Total Mineral Rights Acquisition (split-estate)
	Acres of Inholding Lands			Acres of Adjacent or Interlocked Lands			Total Land	
	STATE	PRIVATE	TOTAL	STATE	PRIVATE	TOTAL	Acquisition	
OR-3-195 (ID-16-48B)	1,120	---	1,120	240	---	240	1,360	3,810
ID-16-48C	---	---	--	---	---	--	---	---
ID-16-49A	1,320	---	1,320	680	---	680	2,000	---
ID-16-49D	---	---	--	---	---	--	---	---
ID-111-49E	760	---	760	1,000	---	1,000	1,760	---
ID-16-52	---	---	--	560	---	560	560	---
ID-16-53 (NV-010-103A)	680	---	680	310	---	310	990	---
NV-010-106	---	---	--	---	---	---	---	---
TOTAL	3,880	---	3,880	2,790	---	2,790	6,670	3,810

[1] A total of 27,020 acres of state and private lands associated with the WSAs are being considered for acquisition (exchange or purchase) regardless of wilderness designation. This table shows that portion of the acreage which would be included in the Owyhee River Management Area should the transfer of ownership occur.

2) Maintain existing public river access roads, acquire recreation easements to provide public access through private property and construct recreation facilities (vault toilets and interpretive signs) at boating launch sites.

Existing public access roads would be maintained at present construction levels at the following locations:

Owyhee River -
(a) Garat Crossing (Pipeline Crossing, Idaho) between WSAs ID-16-49D and 16-52;
(b) Battle Creek confluence between WSAs ID-16-49A, 16-49D and 111-49E;
(c) Crutcher's Crossing between WSAs ID-16-48B and ID-16-49A;
(d) Three Forks adjacent to WSA OR-3-195.

South Fork Owyhee River -
(a) Pipeline Crossing, Nevada, between WSAs NV-010-103A and NV-010-106;
(b) "45" Ranch between WSAs ID-16-48B, ID-16-48C and ID-16-53;
(c) Coyote Hole in WSA ID-16-53.

Acquire recreation easements at the "YP" Ranch at the southern tip of WSA NV-010-106, and at the "45" Ranch between WSAs ID-16-48B and ID-16-53 and maintain roads to provide public boating access into the suitable area. Recreationalists are currently obtaining permission from the private property owners at the time they launch their trips.

Acquire a recreation easement and upgrade the road access into WSA NV-010-106 at Twelve Mile. The upgraded road would provide additional public access to the river and serve as part of the southern boundary of the suitable area. Construction standards would not exceed those at other major Owyhee River access points. The new road would alleviate projected recreation use pressure on the private lands of the "YP" Ranch rather than encourage additional use of the river.

Construct vault toilets on BLM lands at the Garat Crossing in WSA ID-16-49D and at Three Forks in WSA OR-3-195. With the Twelve Mile, "YP" Ranch and "45" Ranch easements, vault toilets would be placed on private property within the South Fork Owyhee River Canyon. Each of the toilet sites would also have one interpretive/informational kiosk (small, roofed, sign structure) and registration box.

3) Close six miles of vehicle routes (interior or cherrystem roads and ways) to the river within the suitable area to general public recreational use. Vehicle routes lying outside the suitable area would not be closed. The miles of roads and ways closed within each WSA under the Canyonlands Wilderness Alternative are shown in Table II-3. Vehicle travel within the boundaries of the Owyhee River Management Area would be limited to existing roads and ways (these roads to be designated or signed). Off-road vehicle (ORV) travel would not be allowed except outside of the suitable area, the Owyhee River Management Area and the adjacent Red Basin Crucial Mule Deer Winter/Spring Range lying within and north of WSA ID-16-49A and ID-16-48B.

4) Stabilize historic cultural sites (stone and wood buildings) on BLM lands (Maps 3F through 3J). These sites include:

a) WSA OR-3-195(ID-16-48B)
State line: T.37S., R.48E., Sec. 23, Oregon
Juniper Basin: T.14S., R.5W., Sec. 28, Idaho

b) WSA ID-16-53
Bull Camp: T.16S., R.4W., Sec. 13, Idaho

Coordinate with state historic preservation offices and county historical societies to stabilize historic cultural sites on private inholdings and adjoining lands which are recommended for acquisition/exchange or easement purchase under the Canyonlands Wilderness Alternative (Maps 3F through 3J). These sites, which are listed on the following page, include:

a) Five Bar: T.36S., R.47E., Secs. 15 and 16, Oregon
b) Crutcher's Crossing: T.13S., R.5W., Sec. 25, Idaho
c) Battle Creek confluence: T.14S., R.2W., Secs. 1 and 2, Idaho
d) Jarvis Creek confluence: T.14S., R.1W., Sec. 19, Idaho
e) Coyote Hole: T.15S., R.4W., Sec. 22, Idaho
f) Twelve Mile: T.46N., R.48E., Sec. 35, Nevada

Reconstruction of roofs on otherwise complete structures would be the primary stabilization measure. Stone structures with only portions of walls standing would be stabilized using compatible mortars where appropriate. Wood structures that are substantially intact (roofs in place) would be stabilized using applications of wood preservative solutions or replacement of rotted timbers, with sod roofing materials being replaced. Wood structures in collapsed, rotted or otherwise poor condition would be allowed to deteriorate naturally since there are no effective stabilization measures other than complete reconstruction. No cement foundations or other soil disturbing activities would occur around buildings. Access would be by vehicle along cherrystem roads or by helicopter.

5) Establish a carrying capacity for river running activities on the Owyhee River system at 182 trips per year with a total of 30,030 user days per year (Table II-4A and 4B). Establish no carrying capacity for backpacking/ horsepacking, hunting or other activities until such time as use levels warrant.

It is anticipated that river running would reach 37% (11,000 user days) of the carrying capacity in 20 years while other recreation activities would reach a total of 4,360 user days.

c. Rangeland Management (Vegetation, Livestock and Wildlife) Actions

Continue of livestock grazing and develop allotment management plans (AMPs) and grazing decisions/agreements for 24 allotments (see Maps 3F through 3J) which would allow the following:

1) Continue grazing use within the suitable area at approximately the level occurring at the time of designation. Increases in grazing use would be permitted in nonsuitable areas as forage becomes available. Livestock and wildlife use in both suitable and nonsuitable areas would be limited to an overall average of less than 50% utilization of available forage. A monitoring program would be used to ensure that utilization. Livestock use is expected to increase to 41,179 AUMs within the WSAs over 20 years from a current use of 29,020 AUMs per annum. Existing and projected livestock use under the Canyonlands Wilderness Alternative is shown on Table II-5A and 5B.

Livestock forage allocations of available forage (not to exceed 50% utilization) on the nonsuitable plateau areas would range between 95% and 97% with the remaining 3% to 5% allocated to wildlife. All forage (100%) would be allocated to wildlife in the canyonlands suitable and nonsuitable areas except in WSAs ID-16-48B, ID-16-48C, ID-16-53, NV-010-103A and NV-010-106 (see Table II-5C).

2) Conduct prescribed burning and seeding projects on the plateau on 29,300 acres of nonsuitable lands (Table II-6B for acreages specific to each WSA). Prescribed burning would occur over a ten year period (approximately 2,930 acres per year). Prescribed burning would occur on 15,600 acres within the Owyhee River Management Area to manage the species composition of native plant communities. Aerial seeding of native grass species and forb species would occur only where natural revegetation is not expected to be sufficient to provide adequate ground cover. On non-ORMA lands, vegetation treatment projects on 13,700 acres would include prescribed burning and the seeding to both native and non-native grass species and native forb species. Non-native seed applications on 50% (6,850 acres) of the burned lands would occur largely with drill machinery, with the remaining 50% (6,850 acres) having aerial seeding or the natural regeneration of native species.

3) Maintain existing range facilities (Maps 3F through 3J). Existing developments within the WSAs are shown on Table II-7A and 7B. Motorized vehicles would be used for facility maintenance.

Reservoir maintenance would occur once every twenty years using bulldozers. Bulldozers would access reservoir sites along existing vehicle routes where available and walked cross-country from the nearest road when vehicle routes are not present. Different routes would be used to access the reservoir sites for each maintenance cycle. Maintenance of reservoir sites would include recontouring dams and dirt piles into crescent or oval shapes resulting in reservoir water impoundments and pit areas with a rounded or oval appearance.

On nonsuitable lands (plateau), fence maintenance by vehicle would be permitted throughout the grazing season. Salting and all monitoring of livestock and rangeland facilities during the grazing season would be done by motor vehicles (including aircraft) or from horseback. On suitable lands (canyonlands), fence maintenance, salting and livestock monitoring throughout the grazing season would be restricted to horseback access.

4) Construct new rangeland facilities on the plateau (nonsuitable). New rangeland facilities would include 13 reservoirs and nine miles of fenceline. Reservoirs would be constructed to blend with the surrounding landscape (low profile and rounded or oval shape). Fences would be constructed to wildlife specifications to allow passage. The number of new facilities for each WSA under the Canyonlands Wilderness Alternative is shown on Table II-8. Reservoir construction would be done with bulldozers and fence construction would be done with other motorized equipment. Access to construction sites would be along existing vehicle routes where available or cross country.

5) Conduct research studies on bighorn sheep. Motorized vehicles and helicopters would be authorized for trapping and transplanting bighorn sheep by state wildlife agencies.

d. Utility Corridor Actions

Develop utility corridors along the El Paso Gas Pipeline right-of-way in Idaho and Nevada, and south and east of Twelve Mile, Nevada (Maps 5D and 5E).

El Paso Corridor

Ten (10) miles of this corridor's length would extend 1/8 mile into WSAs ID-16-49D, 111-49E and 16-52, and about 3/4 mile into WSA NV-010-103A along the El Paso Gas Pipeline. This corridor would be restricted to under ground facilities only. For the purpose of analysis in this EIS, it is projected that one additional buried pipeline would be placed adjacent to the western side of the existing pipeline at a distance of 50 feet.

The new pipeline in the El Paso Corridor would be constructed with bulldozers, backhoes and/or trenching machinery. The area of disturbance along the pipeline route would be 25 feet in width. The pipeline would have a regularly maintained dirt road along its west side to permit periodic inspection and/or maintenance. The road would be constructed at the time of pipe placement using materials, when necessary, from the pipe trenching. Disturbed areas along the east side of the pipeline would be rehabilitated (land recontoured to match terrain features and reseeded to native species).

At the Garat Gorge (WSA ID-16-49D) along the East Fork Owyhee River the pipeline would be suspended across the river immediately adjacent to existing pipeline facilities. At the crossing of the South Fork Owyhee River in Nevada (between WSAs NV-010-103A and 106), the pipeline would be buried immediately adjacent to the existing pipeline. Existing pipeline access roads within the river canyons would be reconstructed (if necessary) and maintained at present construction standards.

Twelve Mile Corridor

This corridor would cross the southern portion of WSA NV-010-106. The five mile wide corridor would extend from Twelve Mile, Nevada, southward beyond the boundary of WSA NV-010-106 and would allow above ground facilities. For the purpose of analysis in this EIS, it is projected that two overhead, high voltage powerline systems would be constructed. The powerlines would traverse the center of the corridor in a southwest-northeast direction for three miles and would lie one mile apart.

The powerline towers would be steel-frame structures about 150 feet high and 90 feet wide with 1,300 feet between towers. No roads would be built, but one vehicle way would develop along each of the powerlines during construction and persist through the passage of recreation vehicles and utility company maintenance vehicles. Large red or orange aircraft warning balls would be placed across the South Fork Owyhee River Canyon on both powerlines.

e. Mineral/Energy Exploration Actions

1) The area designated as wilderness would be closed to mineral entry under the General Mining Law of 1872 subject to valid existing rights. No valid existing rights for mineral deposits are currently identified within the WSA complex nor are projected to be identified prior to wilderness designation. Lands in much of the WSAs are recognized as having a low potential for mineral development. Moderate mineral potential has been identified within and adjacent to the canyonlands of WSA OR-3-195 for silver, gold, and mercury. Based upon this moderate potential, mineral exploration activity is projected to occur at the following locations (see Maps 5A and 5B):

Exploration for silver is projected in T.37S., R.46E., Secs. 12, 13 and 25, and in T.37S., R.47E., Secs. 6, 8, 20, 28, 29, 32 and 33. Less than one acre of disturbance (earth movement with bulldozers and/or backhoes) in each of these sections is projected to occur.

Exploration for gold is projected in T.32S., R.42E., Sec. 14. Less than one acre of surface disturbance in this section is projected to occur.

Exploration for mercury is projected in T.33S., R.44E., Sec. 9 and in T.37S., R.47E., Secs. 4, 24 and 25. Less than one acre of surface disturbance in each of these sections is projected to occur.

No road construction to exploration sites (prospects) would be permitted and bulldozers and other motorized vehicles would travel cross-country. Exploration pits would be rehabilitated (recontoured and seeded), as well as any vehicle ways created while gaining access to prospect locations. Exploration is not projected to uncover mineral deposits of commercial worth.

2) Leasing for oil and gas resources would continue outside the designated wilderness area, resulting in exploration activities including seismic tests and establishment of exploratory drilling sites on the plateau. Drilling sites could not be established within the Owyhee River Management Area because of leasing stipulations which prohibit surface occupancy.

Seismic testing would entail the use of large, specialized, three-axle vehicles which impact or "thump" the ground to obtain seismic readings from underlying rock strata. For the purpose of analysis in this EIS, it is projected that the vehicles would generally travel cross-country in a three to five mile wide grid pattern leaving behind wheel tracks consisting of crushed sagebrush plants.

For the purpose of analysis in this EIS, exploratory drilling is projected to occur at three locations (Maps 5B through 5D):

WSA OR-3-195: T.38S., R.48E., Sec. 22, Oregon
WSA ID-16-48C: T.14S., R.5W., Sec. 33, Idaho
WSA ID-16-49A: T.14S., R.3W., Sec. 9, Idaho

Each of the exploration sites would have a 150-foot high drilling rig, several small metal buildings, a one acre mud pond, and stockpiled drilling materials. The total disturbed area at each site would be about 10 acres. Access to the drilling sites would be via a way (unconstructed two-wheel track) from the nearest WSA boundary road. The maximum length of any one of the three ways would be 1.3 miles. The topsoil at each site would be scraped off and stockpiled adjacent to the site for eventual rehabilitation (recontouring and seeding of disturbed areas to blend with the landscape) prior to the placement of any structures. The access way would also be rehabilitated at the close of operations. Each of the sites is projected to be active for a period of nine to twelve months. Rehabilitation of exploratory sites is projected to take three to five years. For the purpose of the analysis of this EIS (based upon the best available information), none of the sites are projected to become productive.

WILDLIFE WILDERNESS ALTERNATIVE: Maps Series 6

Under this alternative, 291,910 acres of public land are recommended suitable for wilderness designation and incorporate portions of seven WSAs. The suitable acreage would include only those canyonlands and plateau which are existing or potential habitat for California bighorn sheep populations. These lands also provide for the habitat needs of other principal wildlife species associated with the rhyolite upland-canyonlands/sagebrush-bunchgrass ecosystem.

There are 155,257 acres which are recommended nonsuitable for wilderness. Of this nonsuitable acreage, 9,290 acres of canyon and plateau along the South Fork Owyhee River in Nevada WSA NV-010-106, south of the El Paso Gas Pipeline right-of-way, would be managed under the Owyhee River Management Area designations as described in the Wild River (No Wilderness) Alternative.

The acreage recommendations by WSA for this alternative would be as follows:

TABLE II-13

WILDLIFE WILDERNESS ALTERNATIVE
ACRES RECOMMENDED SUITABLE/NONSUITABLE AS WILDERNESS (BLM ACRES)[1]

WSA	Nonsuitable as Wilderness				Suitable as Wilderness			
	OREGON	IDAHO	NEVADA	TOTAL	OREGON	IDAHO	NEVADA	TOTAL
OR-3-195 (ID-16-48B)	77,030	300	--	77,330	113,670	33,400	--	147,070
ID-16-48C	--	16,140	--	16,140	---	8,460	--	8,460
ID-16-49A	--	15,310	--	15,310	---	55,530	--	55,530[2]
ID-16-49D	--	440	--	440	---	9,550	--	9,550
ID-111-49E	--	5,580	--	5,580	---	26,380	--	26,380[3]
ID-16-52	--	3,220	--	3,220	---	9,930	--	9,930
ID-16-53 (NV-010-103A)	--	11,050	4,312	15,362	---	31,460	3,530	34,990
NV-010-106	--	---	21,875	21,875	---	---	0	0
BLM TOTAL	77,030	52,040	26,417	155,257	113,670	174,710	3,530	291,910

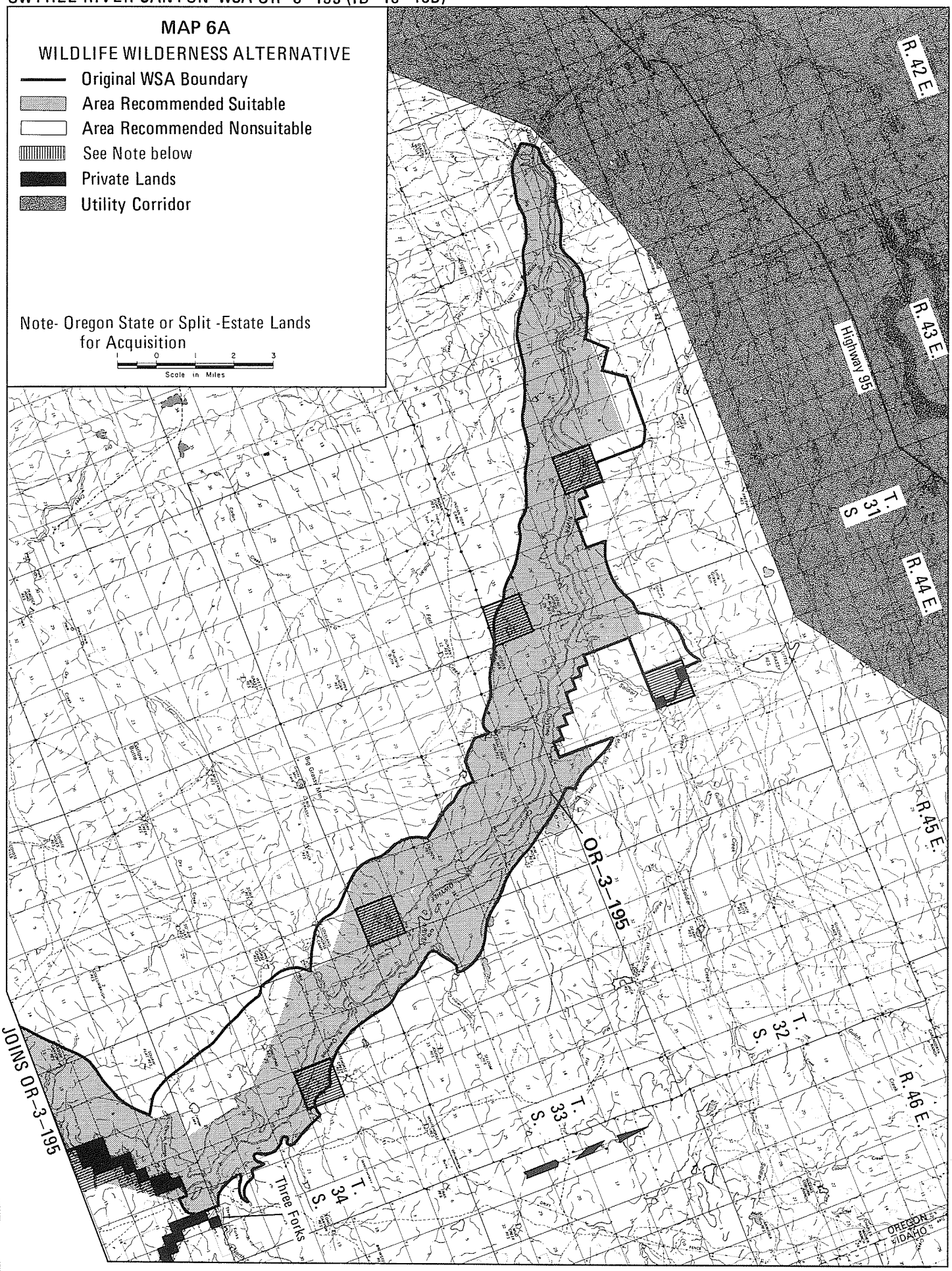
[1] An additional 12,440 acres of non-BLM lands would be included in the suitable area following land acquisition (Table II-14).
[2] Includes 680 acres of land outside the WSA boundaries.
[3] Includes 420 acres of land outside the WSA boundaries.

Specific management actions in the WSAs are shown below:

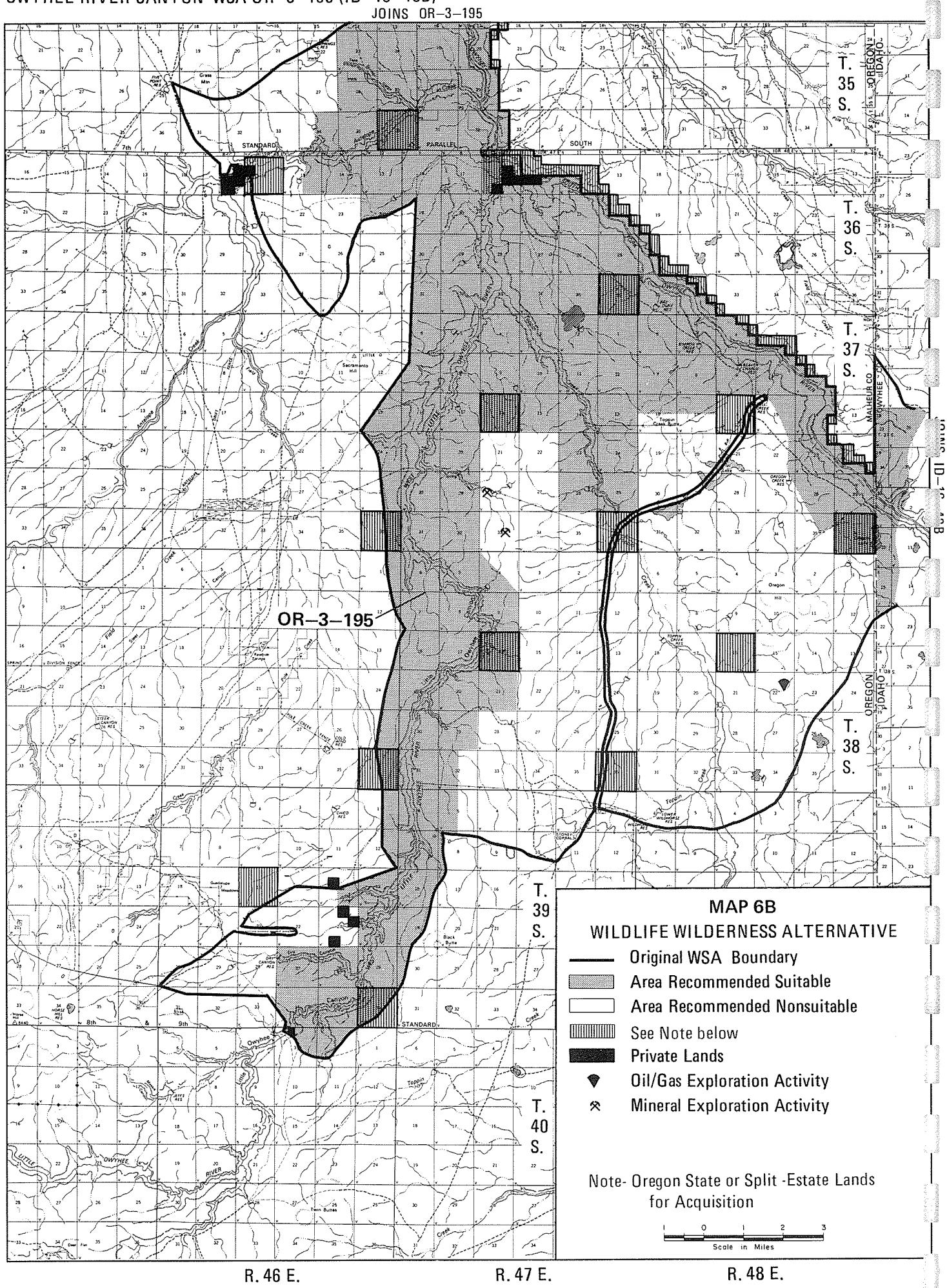
a. Land Acquisition

Continue negotiations with state land agencies to exchange lands and/or acquire subsurface mineral rights (Oregon split-estate lands). Negotiations with private land owners would also be initiated to acquire properties. The

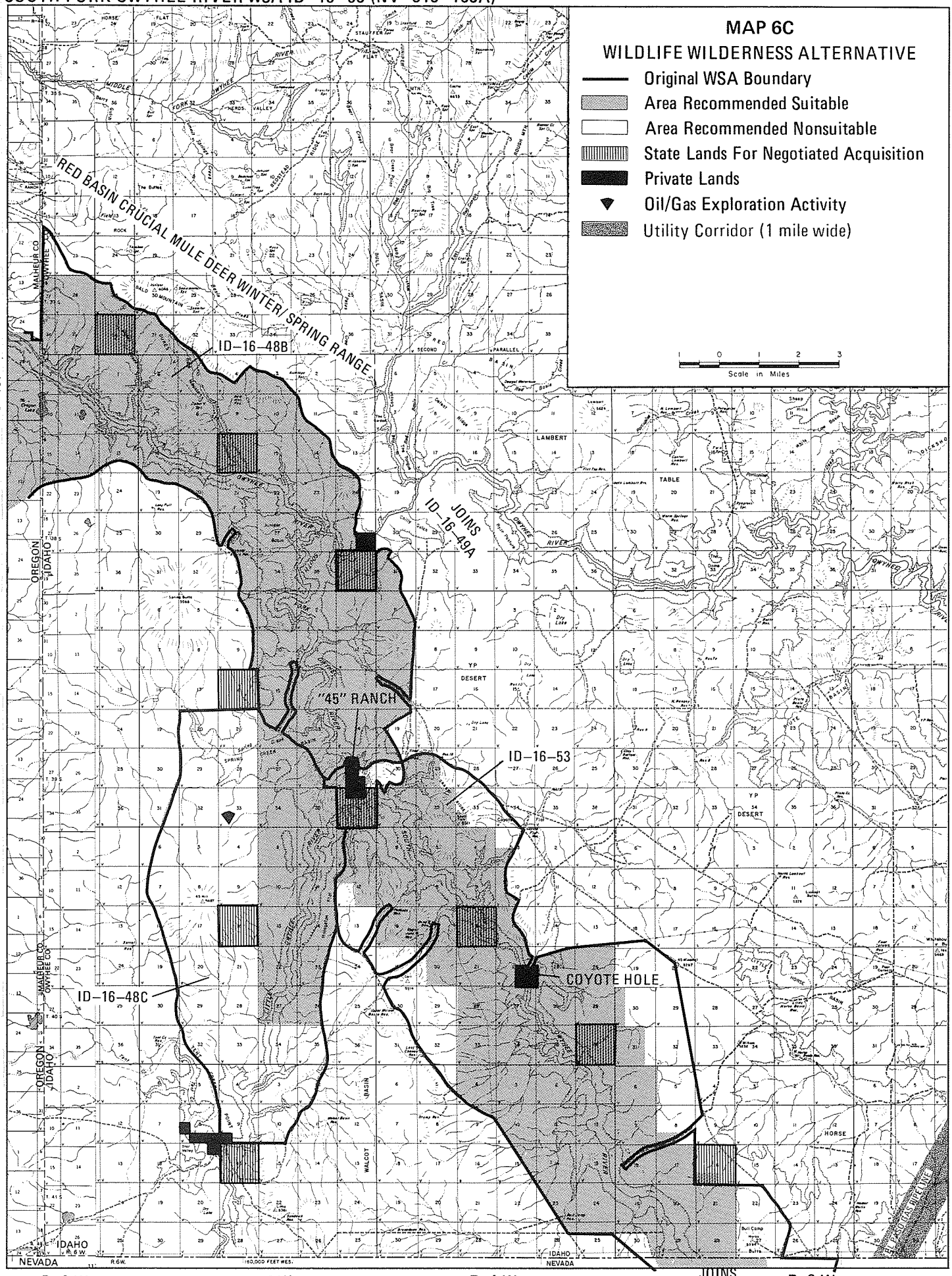
OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



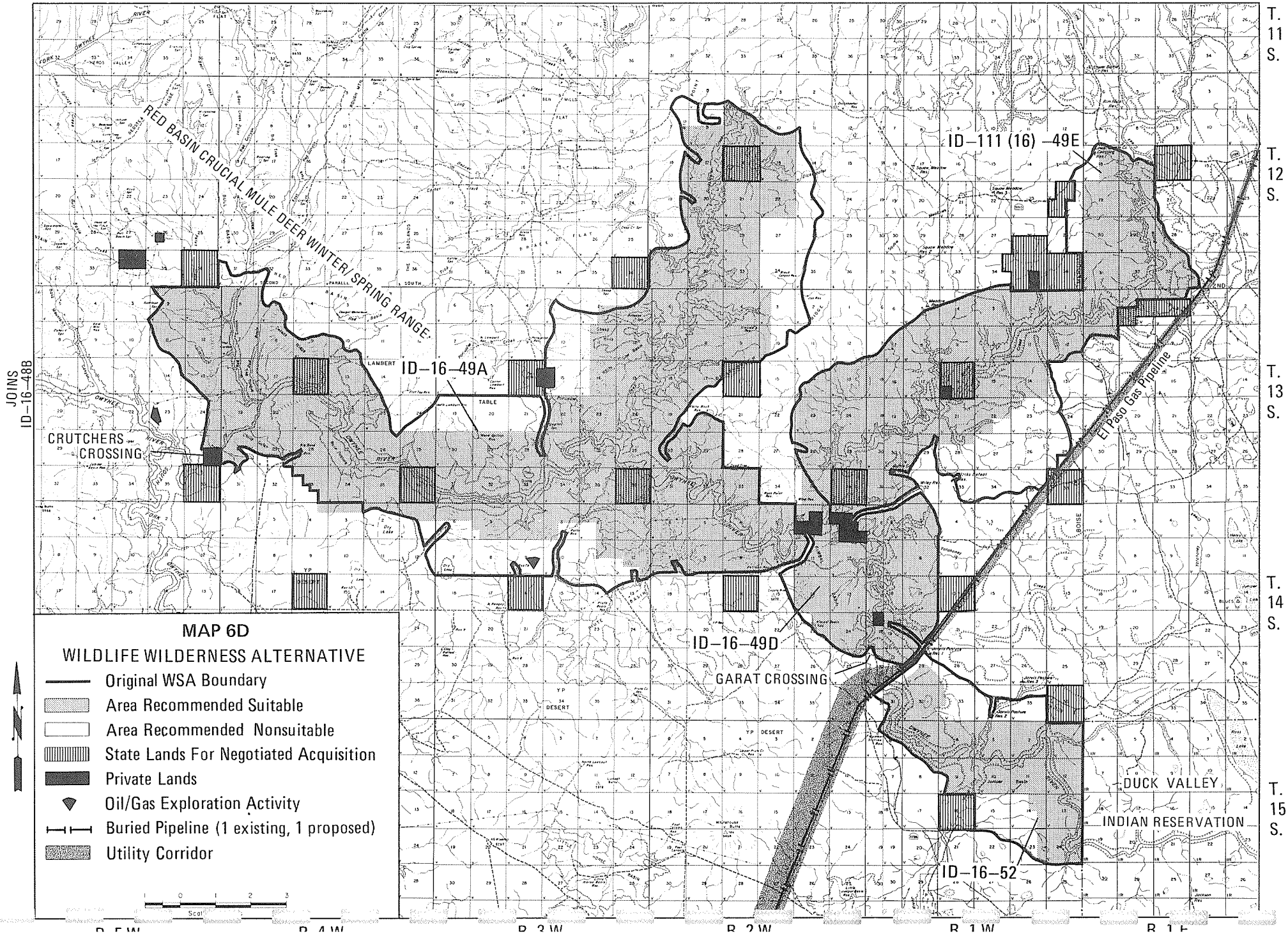
OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



OWYHEE RIVER CANYON WSA OR-3-195 (ID-16-48B)
LITTLE OWYHEE RIVER WSA ID-16-48C
SOUTH FORK OWYHEE RIVER WSA ID-16-53 (NV-010-103A)



YATAHONEY CREEK WSA ID–16–49D
BATTLE CREEK WSA ID–111 (16) –49E
OWYHEE RIVER–DEEP CREEK WSA ID–16–49A JUNIPER CREEK (UPPER OWYHEE RIVER) ID–16–52

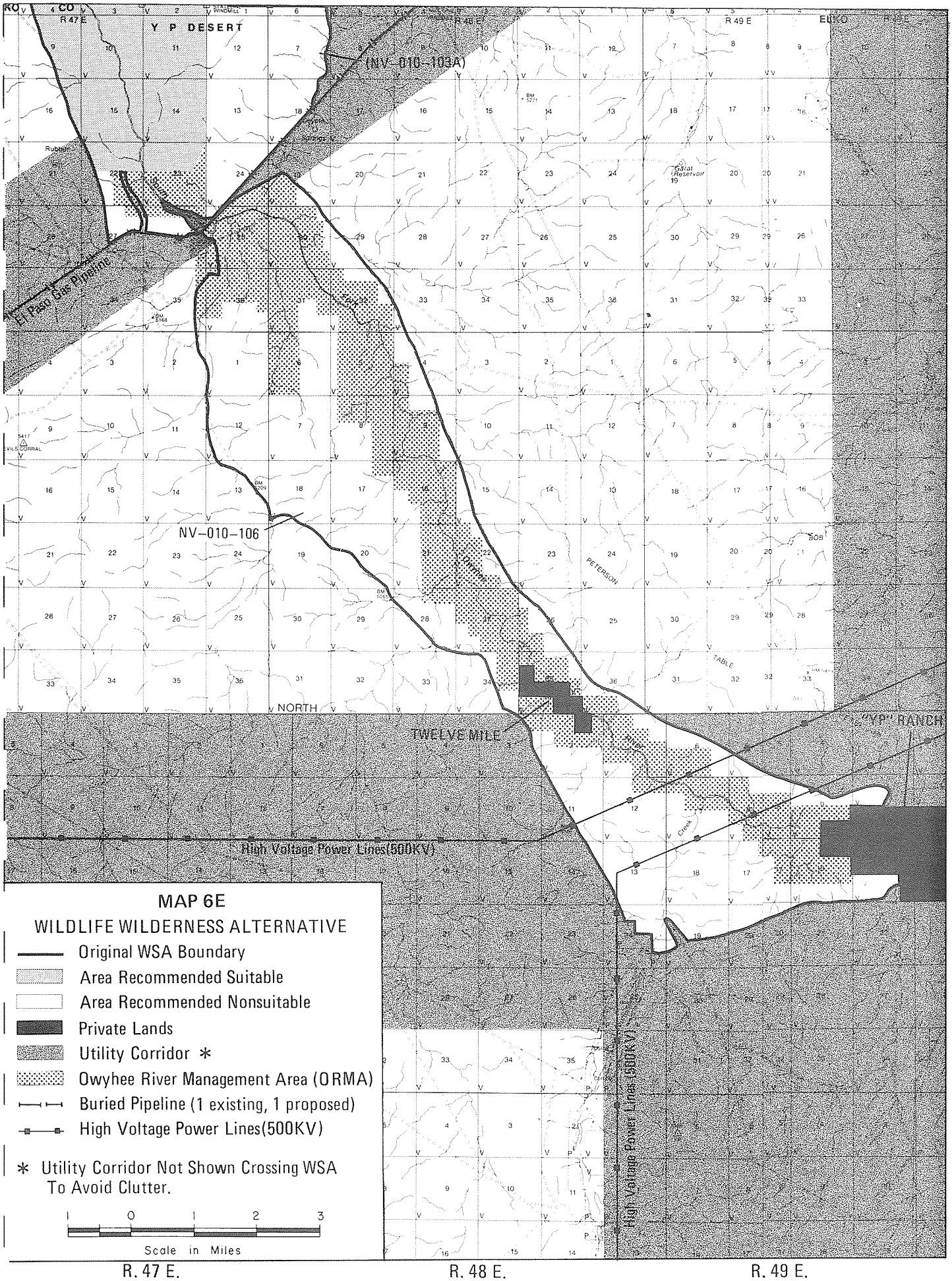


MAP 6D

WILDLIFE WILDERNESS ALTERNATIVE

- Original WSA Boundary
- Area Recommended Suitable
- Area Recommended Nonsuitable
- State Lands For Negotiated Acquisition
- Private Lands
- Oil/Gas Exploration Activity
- Buried Pipeline (1 existing, 1 proposed)
- Utility Corridor

OWYHEE CANYON WSA NV–010–106
SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)



lands recommended for fee title acquisition or exchange and for mineral rights acquisition are shown on Tables II-14. These lands, particularly those in the canyon areas, have the potential to be developed for recreation resort facilities, irrigated pasture lands and/or mineral and energy resources.

TABLE II-14

LANDS RECOMMENDED FOR ACQUISITION AND INCLUSION IN THE SUITABLE BLM WILDERNESS RECOMMENDATION UNDER THE WILDLIFE WILDERNESS ALTERNATIVE[1]

WSA	Lands Acquisition							Total Mineral Rights Acquisition (split-estate)
	Acres of Inholding Lands			Acres of Adjacent or Interlocked Lands			Total Land Acquisition	
	IDAHO STATE	PRIVATE	TOTAL	IDAHO STATE	PRIVATE	TOTAL		
OR-3-195 (ID-16-48B)	1,280	---	1,280	3,280	920	4,200	5,480	6,640
ID-16-48C	---	---	--	190	---	190	190	---
ID-16-49A	2,560	---	2,560	120	160	280	2,840	---
ID-16-49D	---	40	40	---	200	200	240	---
ID-111-49E	1,240	40	1,280	320	200	520	1,800	---
ID-16-52	---	---	--	0	---	0	0	---
ID-16-53 (NV-010-103A)	1,280	160	1,440	450	---	450	1,890	---
NV-010-106	---	---	--	---	---	---	---	---
TOTAL	6,360	240	6,600	4,360	1,480	5,840	12,440	6,640

[1] A total of 27,020 acres of state and private lands associated with the WSAs are being considered for acquisition (exchange or purchase) regardless of wilderness designation. This table shows that portion of the acreage which would be included in the suitable area should the transfer of ownership occur.

b. Recreation Management Actions

Management actions pertaining to WSA OR-3-195 are taken from the Owyhee National Wild River Management Plan.

1) Maintain the existing "45" dam (T.14S., R.5W., Sec. 25) to allow for boater passage and continued operation for irrigation purposes on the South Fork Owyhee River within Idaho. Dam maintenance would consist of replacing rock materials which become dislodged during annual high water flows. The dam site and nearby rock borrow pit are accessed by an established road.

2) Maintain existing public river access roads, acquire recreation easements to provide public access through private property and construct recreation facilities (vault toilets and interpretive signs) at boating launch sites.

Existing public access roads would be maintained at present construction levels at the following locations:

Owyhee River -
(a) Garat Crossing (Pipeline Crossing, Idaho) between WSAs ID-16-49D and 16-52;
(b) Battle Creek confluence between WSAs ID-16-49A, 16-49D and 111-49E;
(c) Crutcher's Crossing between WSAs ID-16-48B and ID-16-49A;
(d) Three Forks adjacent to WSA OR-3-195;
South Fork Owyhee River -
(a) Pipeline Crossing, Nevada, between WSAs NV-010-103A and NV-010-106;
(b) "45" Ranch between WSAs ID-16-48B, ID-16-48C and ID-16-53;
(c) Coyote Hole in WSA ID-16-53.

Acquire recreation easements at the "YP" Ranch at the southern tip of WSA NV-010-106, and at the "45" Ranch between WSAs ID-16-48B and ID-16-53 and maintain roads to provide public boating access into the suitable area. Recreationalists are currently obtaining permission from the private property owners at the time they launch their trips.

Acquire a recreation easement and upgrade the road access into WSA NV-010-106 at Twelve Mile. The upgraded road would provide additional public access to the river and serve as part of the southern boundary of the suitable area. Construction standards would not exceed those at other major Owyhee River access points. The new road would alleviate projected recreation use pressure on the private lands of the "YP" Ranch rather than encourage additional use of the river.

Construct vault toilets on BLM lands at the Garat Crossing in WSA ID-16-49D and at Three Forks in WSA OR-3-195. With the Twelve Mile, "YP" Ranch and "45" Ranch easements, vault toilets would be placed on private property within the South Fork Owyhee River Canyon. Each of the toilet sites would also have one interpretive/informational kiosk (small, roofed, sign structure) and registration box.

3) Close 75.8 miles of vehicle routes (interior or cherrystem roads and ways) to the river within the suitable area to general public recreational use. Vehicle routes lying outside the suitable area would not be closed. The miles of roads and ways closed within each WSA under the Wildlife Wilderness Alternative are shown in Table II-3. Vehicle travel within the boundaries of the Owyhee River Management Area would be limited to existing roads and ways (these roads to be designated or signed). Off-road vehicle (ORV) travel would not be allowed except outside of the suitable area, the Owyhee River Management Area and the adjacent Red Basin Crucial Mule Deer Winter/Spring Range lying within and north of WSA ID-16-49A and ID-16-48B.

4) Stabilize historic cultural sites (stone and wood buildings) on BLM lands (Maps 3F through 3J). These sites include:

a) WSA OR-3-195(ID-16-48B)
State line: T.37S., R.48E., Sec. 23, Oregon
Juniper Basin: T.14S., R.5W., Sec. 28, Idaho

b) WSA ID-16-53
Bull Camp: T.16S., R.4W., Sec. 13, Idaho

Coordinate with state historic preservation offices and county historical societies to stabilize historic cultural sites on private inholdings and adjoining lands which are recommended for acquisition/exchange or easement purchase under the Wildlife Wilderness Alternative (Maps 3F through 3J). These sites include:

a) Five Bar: T.36S., R.47E., Secs. 15 and 16, Oregon
b) Crutcher's Crossing: T.13S., R.5W., Sec. 25, Idaho
c) Battle Creek confluence: T.14S., R.2W., Secs. 1 and 2, Idaho
d) Jarvis Creek confluence: T.14S., R.1W., Sec. 19, Idaho
e) Coyote Hole: T.15S., R.4W., Sec. 22, Idaho
f) Twelve Mile: T.46N., R.48E., Sec. 35, Nevada

Reconstruction of roofs on otherwise complete structures would be the primary stabilization measure. Stone structures with only portions of walls standing would be stabilized using compatible mortars where appropriate. Wood structures that are substantially intact (roofs in place) would be stabilized using applications of wood preservative solutions or replacement of rotted timbers, with sod roofing materials being replaced. Wood structures in collapsed, rotted or otherwise poor condition would be allowed to deteriorate naturally since there are no effective stabilization measures other than complete reconstruction. No cement foundations or other soil disturbing activities would occur around buildings. Access would be by vehicle along cherrystem roads or by helicopter.

5) Establish a carrying capacity for river running activities on the Owyhee River system at 182 trips per year with a total of 30,030 user days per year (Table II-4A and 4B). Establish no carrying capacity for backpacking/horsepacking, hunting or other activities until such time as use levels warrant.

It is anticipated that river running would reach 37% (11,000 user days) of the carrying capacity in 20 years while other recreation activities would reach a total of 4,645 user days.

c. Rangeland Management (Vegetation, Livestock and Wildlife) Actions

Continue livestock grazing and develop allotment management plans (AMPs) and grazing decisions/ agreements for 24 allotments (Maps 3F through 3J) which would allow the following:

1) Continue grazing use within the suitable area at approximately the level occurring at the time of designation. Increases in grazing use would be permitted in nonsuitable areas as forage becomes available. Livestock and wildlife use in both suitable and nonsuitable areas would be limited to an overall average of less than 50% utilization of available forage. A monitoring program would be used to ensure that utilization. Livestock use is

expected to decrease to 28,873 AUMs within the WSAs over 20 years from a current use of 29,020 AUMs per annum. Existing and projected livestock use under the Wildlife Wilderness Alternative is shown on Table II-5A and 5B.

Livestock forage allocations of available forage (not to exceed 50% utilization) on the plateau (both suitable and nonsuitable areas) would range between 95% and 97% with the remaining 3% to 5% allocated to wildlife. All forage (100%) would be allocated to wildlife in the canyonlands suitable and nonsuitable areas except in WSAs ID-16-48B, ID-16-48C, ID-16-53, NV-010-103A and NV-010-106 (see Table II-5C).

2) Conduct prescribed burning and seeding projects on the plateau on 15,200 acres of suitable lands and on 13,300 acres of nonsuitable lands (Table II-6B for acreages specific to each WSA). Prescribed burning would occur over a ten year period (approximately 2,850 acres per year). Prescribed burning would occur in the suitable area (Table II-6A) to manage species composition of native plant communities. Some seeding (aerial application only) of native grass species and forb species would occur only where natural revegetation is not expected to be sufficient to provide adequate ground cover. On nonsuitable lands, vegetation treatment projects would include prescribed burning and the seeding (drill machine application) to non-native grass species and native forb species on 50% (6,650 acres) of the lands burned. Aerial seeding or natural regeneration of native species would occur on the remaining 50% (6,650 acres) of burned lands (Table II-6B).

Additional forage as a result of prescribed burning and land treatments would be available for livestock use only outside the suitable area. Additional forage within the suitable area would be available for wildlife only.

3) Maintain existing range facilities (Maps 3F through 3J). Existing developments within the WSAs are shown on Table II-7A and 7B. Motorized vehicles would be used for facility maintenance.

Reservoir maintenance would occur once every twenty years using bulldozers in both suitable and nonsuitable areas. Bulldozers would access reservoir sites along existing vehicle routes where available and walked cross-country from the nearest road when vehicle routes are not present. Different routes would be used to access the reservoir sites for each maintenance cycle. Maintenance of reservoir sites include recontouring dams and dirt piles into crescent or oval shapes resulting in reservoir water impoundment and pit areas with a rounded or oval appearance.

Within the suitable area, fence maintenance by vehicle would be permitted once each year at the beginning of the grazing season. Salting and all monitoring of livestock and rangeland facilities during the grazing season would be done from horseback. Emergency use of vehicles during mid-grazing seasons would be permitted on a case-by-case basis to repair damaged facilities or retrieve sick or injured animals.

In nonsuitable areas, fence maintenance by vehicle would be permitted throughout the grazing season. Salting and all monitoring of livestock and

rangeland facilities during the grazing season would be done with motorized vehicles (including aircraft) or from horseback, except in canyon areas where access would be restricted to horseback.

4) Construct new rangeland facilities in both suitable and nonsuitable areas. New rangeland facilities would include ten reservoirs and nine miles of fenceline. Reservoirs would be constructed to blend with the surrounding landscape (low profile and rounded or oval shape). Fences would be constructed to wildlife specifications to allow passage. The number of new facilities for each WSA under the Wildlife Wilderness Alternative is shown on Table II-8. Reservoir construction would be done with bulldozers and fence construction would be done with other motorized equipment. Access to construction sites would be along existing vehicle routes where available or cross-country.

5) Conduct research studies on bighorn sheep. Motorized vehicles and helicopters would be authorized for trapping and transplanting bighorn sheep by state wildlife agencies.

d. Utility Corridor Actions

Develop utility corridors along the El Paso Gas Pipeline right-of-way in Idaho and Nevada, and south and east of Twelve Mile, Nevada (Maps 6D and 6E).

El Paso Corridor

Ten (10) miles of this corridor's width would extend 1/8 mile into WSAs ID-16-49D, 111-49E and 16-52, and about 3/4 mile into WSA NV-010-103A along the El Paso Gas Pipeline. This corridor would be restricted to under ground facilities only. For the purpose of analysis in this EIS, it is projected that one additional buried pipeline would be placed adjacent to the western side of the existing pipeline at a distance of 50 feet.

The new pipeline in the El Paso Corridor would be constructed with bulldozers, backhoes and/or trenching machinery. The area of disturbance along the pipeline route would be 25 feet in width. The pipeline would have a regularly maintained dirt road along its west side to permit periodic inspection and/or maintenance. The road would be constructed at the time of pipe placement using materials, when necessary, from the pipe trenching. Disturbed areas along the east side of the pipeline would be rehabilitated (land recontoured to match terrain features and reseeded to native species).

At the Garat Gorge (WSA ID-16-49D) along the East Fork Owyhee River the pipeline would be suspended across the river immediately adjacent to existing pipeline facilities. At the crossing of the South Fork Owyhee River in Nevada (between WSAs NV-010-103A and 106), the pipeline would be buried immediately adjacent to the existing pipeline. Existing pipeline access roads within the river canyons would be reconstructed (if necessary) and maintained at present construction standards.

Twelve Mile Corridor

This corridor would cross the southern portion of WSA NV-010-106. The five-mile wide corridor would extend from Twelve Mile, Nevada, southward beyond the boundary of WSA NV-010-106 and would allow above ground facilities. For the purpose of analysis in this EIS, it is projected that two overhead, high voltage powerline systems would be constructed. The powerlines would traverse the center of the corridor in a southwest-northeast direction for three miles and would lie one mile apart.

The powerline towers would be steel-frame structures about 150 feet high and 90 feet wide with and 1,300 feet between towers. No roads would be built, but one vehicle way would develop along each of the powerlines during construction and persist through the passage of recreation vehicles and utility company maintenance vehicles. Large red or orange aircraft warning balls would be placed across the South Fork Owyhee River Canyon on both powerlines.

e. Mineral/Energy Exploration Actions

1) The area designated as wilderness would be closed to mineral entry under the General Mining Law of 1872 subject to valid existing rights. No valid existing rights for mineral deposits are currently identified within the WSA complex nor are projected to be identified prior to wilderness designation. Lands in much of the WSAs are recognized as having a low potential for mineral development, except around Louse Canyon (West Little Owyhee River), Oregon, in WSA OR-3-195, where mineral potential is identified as moderate for silver. Based upon this moderate potential, mineral exploration activity is projected to occur at the following locations: T.37S., R.47E., Secs. 28 and 33. Less than one acre of disturbance (earth movement with bulldozers and/or backhoes) in each of these sections is projected to occur.

No road construction to exploration sites (prospects) would be permitted and bulldozers and other motorized vehicles would travel cross-country. Exploration pits would be rehabilitated (recontoured and seeded), as well as any vehicle ways created while gaining access to prospect locations. Exploration is not projected to uncover mineral deposits of commercial worth.

2) Oil and gas leasing would not be permitted within the area designated as wilderness. Leasing could occur on nonwilderness plateau lands, resulting in exploration activities including seismic tests and establishment of exploratory drilling sites.

Seismic testing would entail the use of large, specialized, three-axle vehicles which impact or "thump" the ground to obtain seismic readings from underlying rock strata. For the purpose of analysis in this EIS, it is projected that the vehicles would generally travel cross-country in a three to five mile wide grid pattern leaving behind wheel tracks consisting of crushed sagebrush plants.

For the purpose of analysis in this EIS, exploratory drilling is projected to occur at three locations (see Maps 6B through 6D):

WSA OR-3-195: T.38S., R.48E., Sec. 22, Oregon
WSA ID-16-48C: T.14S., R.5W., Sec. 33, Idaho
WSA ID-16-49A: T.14S., R.3W., Sec. 9, Idaho

Each of the exploration sites would have a 150-foot high drilling rig, several small metal buildings, a one acre mud pond, and stockpiled drilling materials. The total disturbed area at each site would be about 10 acres. Access to the drilling sites would be via a way (unconstructed two-wheel track) from the nearest WSA boundary road. The maximum length of any one of the three ways would be 1.3 miles. The topsoil at each site would be scraped off and stockpiled adjacent to the site for eventual rehabilitation (recontouring and seeding of disturbed areas to blend with the landscape) prior to the placement of any structures. The access way would also be rehabilitated at the close of operations. Each of the sites is projected to be active for a period of nine to twelve months. Rehabilitation of exploratory sites is projected to take three to five years. For the purpose of the analysis of this EIS (based upon the best available information), none of the sites are projected to become productive.

ALL WILDERNESS ALTERNATIVE: Maps Series 7

Under this alternative, all 450,272 acres of BLM land involving the eight WSAs are recommended as suitable for wilderness designation.

The acreage recommendations by WSA for this alternative would be as follows:

TABLE II-15

ALL WILDERNESS ALTERNATIVE
ACRES RECOMMENDED SUITABLE AS WILDERNESS (BLM ACRES)[1]

WSA	Suitable as Wilderness			
	OREGON	IDAHO	NEVADA	TOTAL
OR-3-195 (ID-16-48B)	190,700	33,700	--	224,400
ID-16-48C	--	26,530	--	26,530[2]
ID-16-49A	--	71,780	--	71,780[3]
ID-16-49D	--	9,990	--	9,990
ID-111-49E	--	31,960	--	31,960[4]
ID-16-52	--	13,150	--	13,150
ID-16-53 (NV-010-103A)	--	42,745	7,842	50,587[5]
NV-010-106	--	--	21,875	21,875
BLM TOTAL	190,700	229,855	29,717	450,272

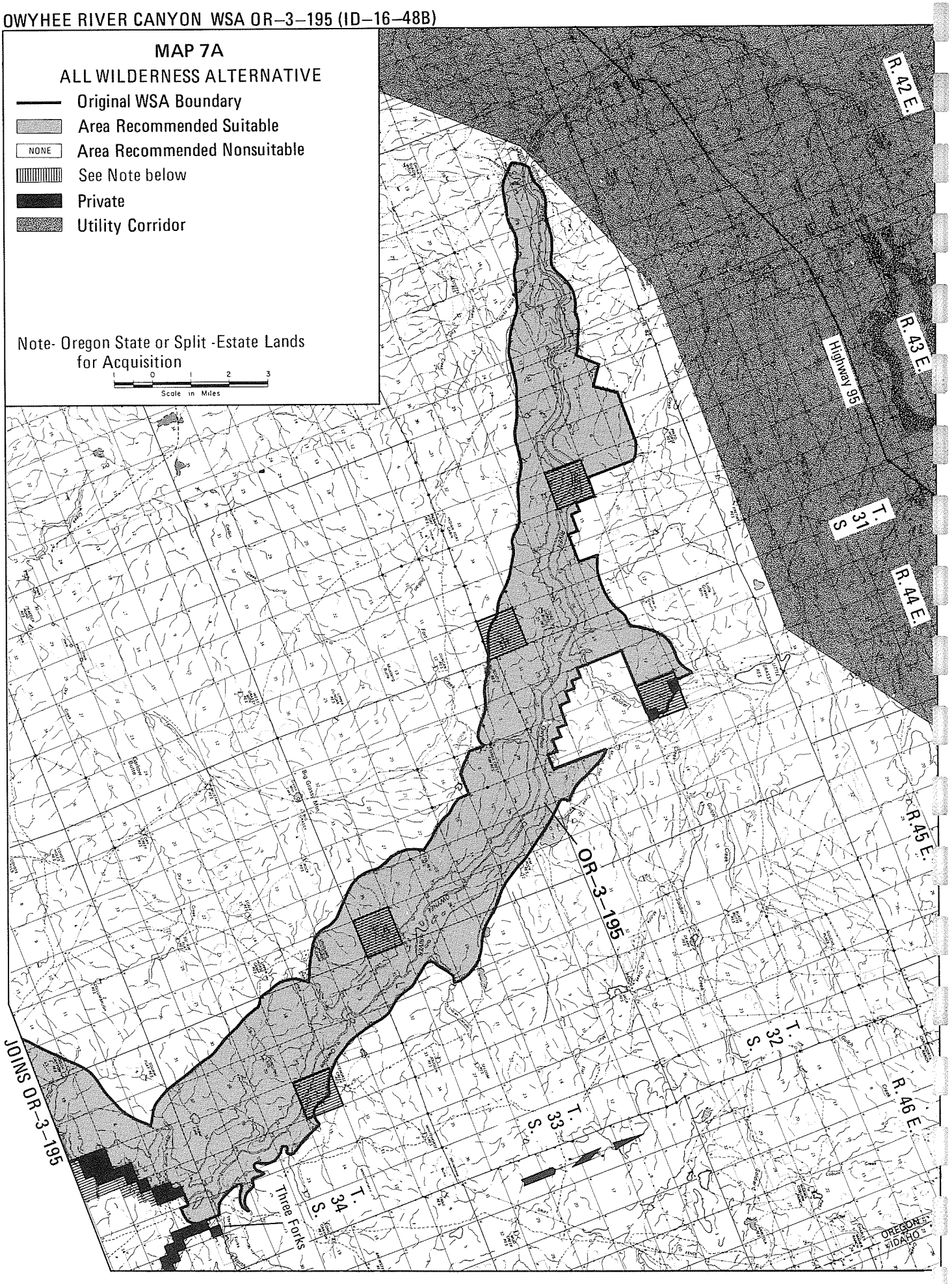
[1] An additional 16,060 acres of non-BLM lands would be included in the suitable area following land acquisition (Table II-16).
[2] Includes 1,930 acres of public land outside the WSA boundary.
[3] Includes 1,620 acres of public land outside the WSA boundary.
[4] Includes 420 acres of public land outside the WSA boundary.
[5] Includes 235 acres of public land outside the WSA boundary.

Specific management actions in the WSAs are shown below:

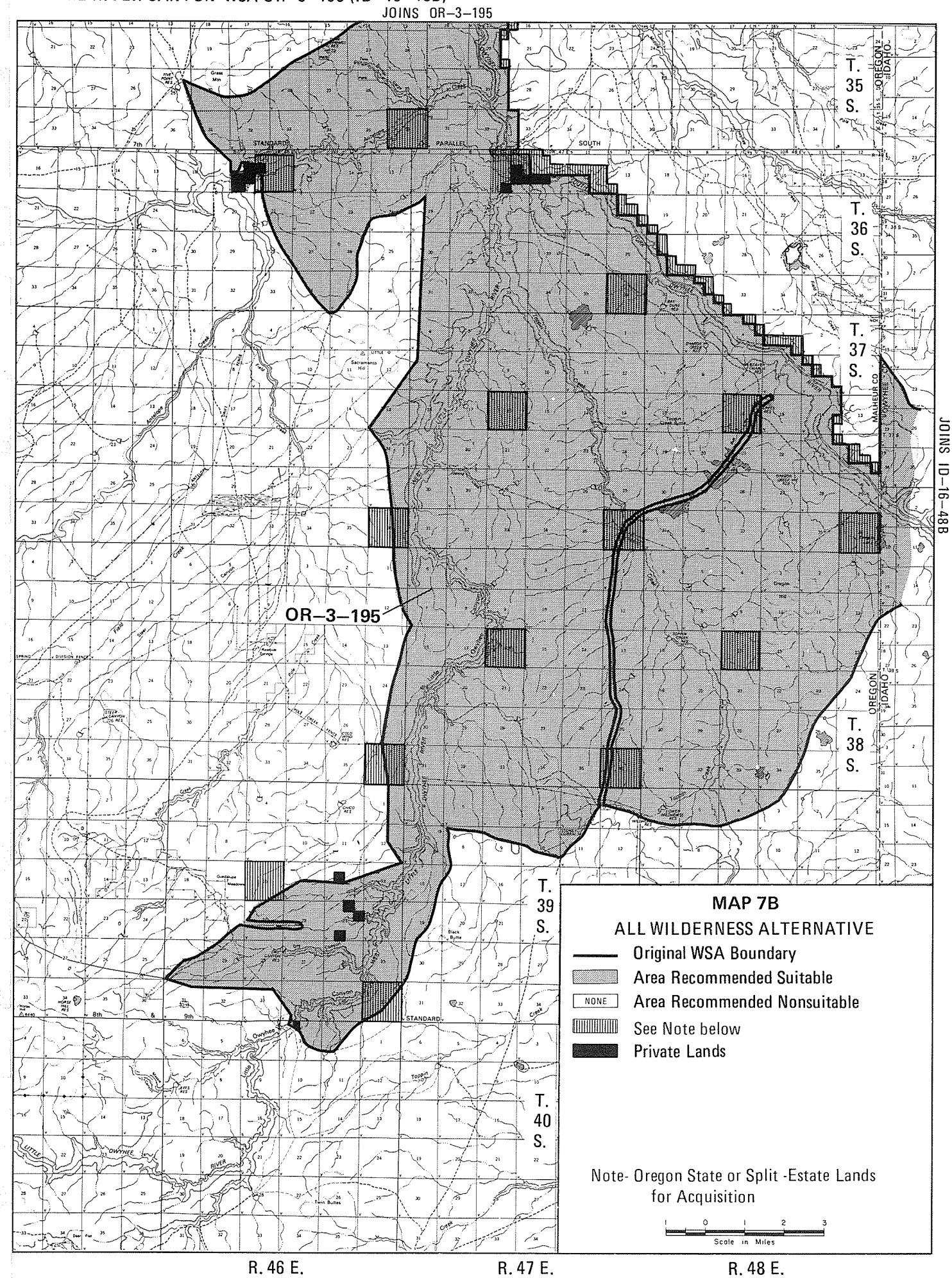
a. Land Acquisition

Continue negotiations with state land agencies to exchange lands and/or acquire subsurface mineral rights (Oregon split-estate lands). Negotiations with private land owners would also be initiated to acquire properties. The lands recommended for fee title acquisition or exchange and for mineral rights acquisition are shown on Table II-16. These lands, particularly those in the canyon areas, have the potential to be developed for recreation resort facilities, irrigated pasture lands, and/or mineral and energy resources.

OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



OWYHEE RIVER CANYON WSA OR–3–195 (ID–16–48B)



MAP 7B

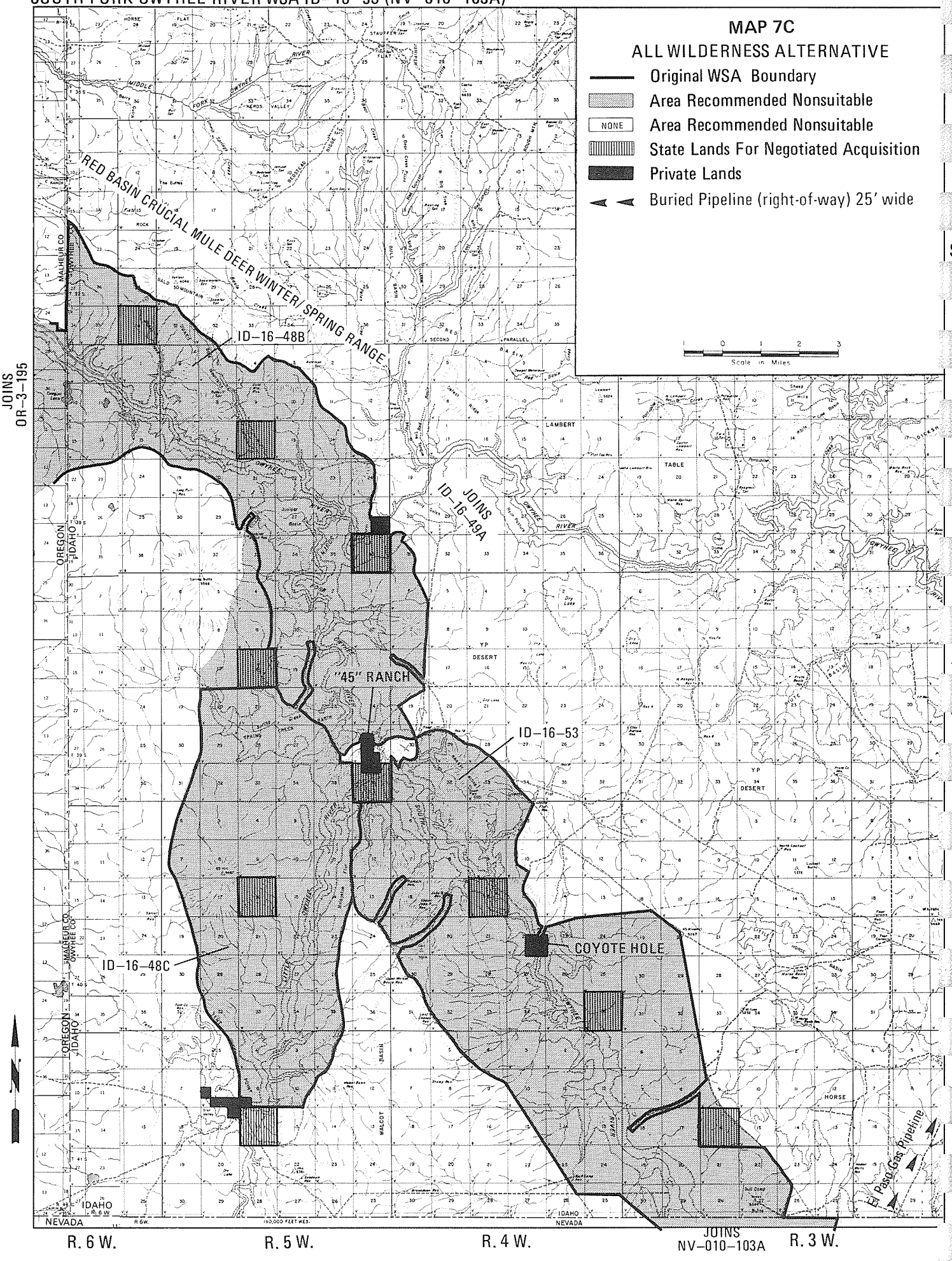
ALL WILDERNESS ALTERNATIVE

- Original WSA Boundary
- Area Recommended Suitable
- NONE — Area Recommended Nonsuitable
- See Note below
- Private Lands

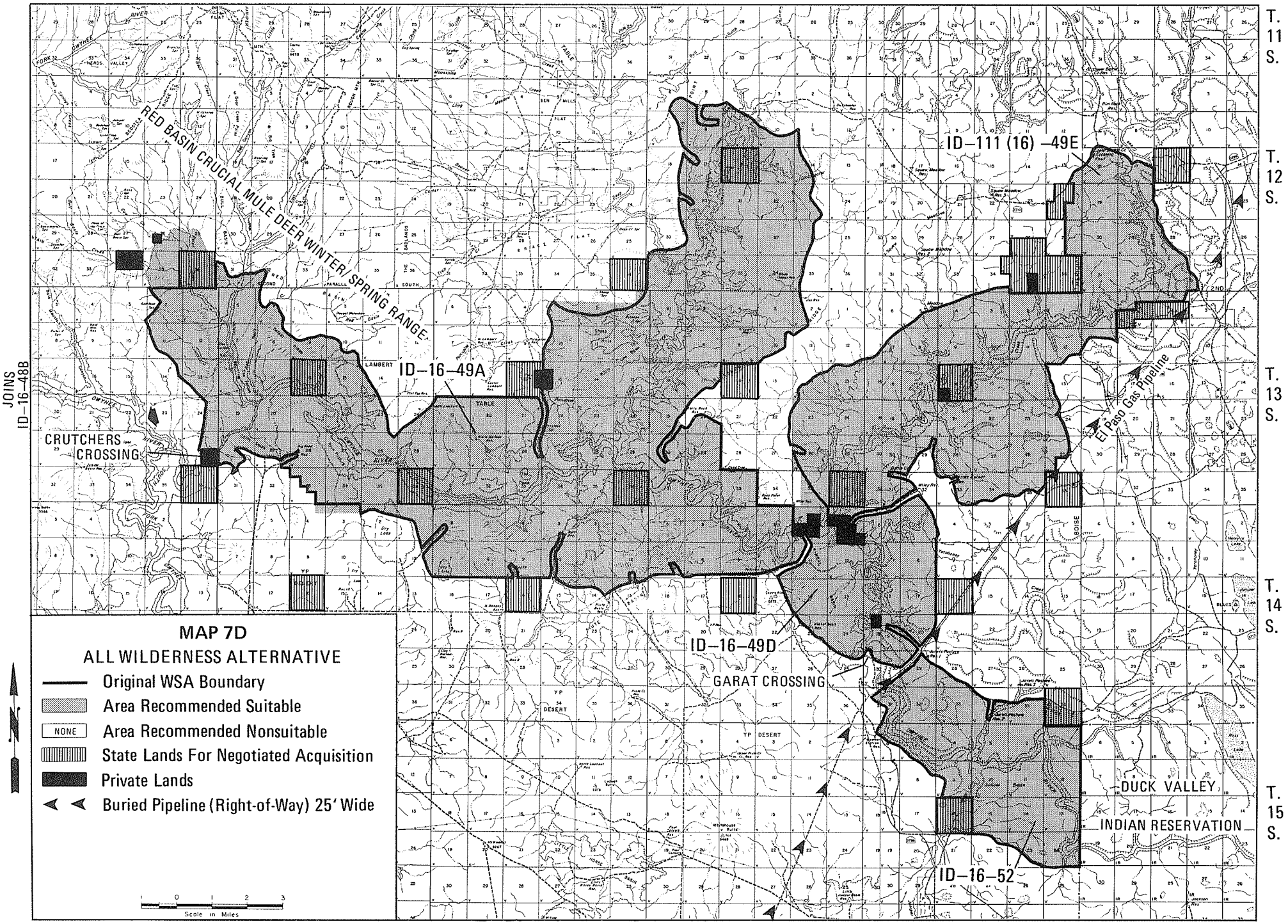
Note- Oregon State or Split -Estate Lands for Acquisition

Scale in Miles

OWYHEE RIVER CANYON WSA OR-3-195 (ID-16-48B)
LITTLE OWYHEE RIVER WSA ID-16-48C
SOUTH FORK OWYHEE RIVER WSA ID-16-53 (NV-010-103A)



OWYHEE RIVER–DEEP CREEK WSA ID–16–49A JUNIPER CREEK (UPPER OWYHEE RIVER) ID–16–52



OWYHEE CANYON WSA NV–010–106
SOUTH FORK OWYHEE RIVER WSA ID–16–53 (NV–010–103A)

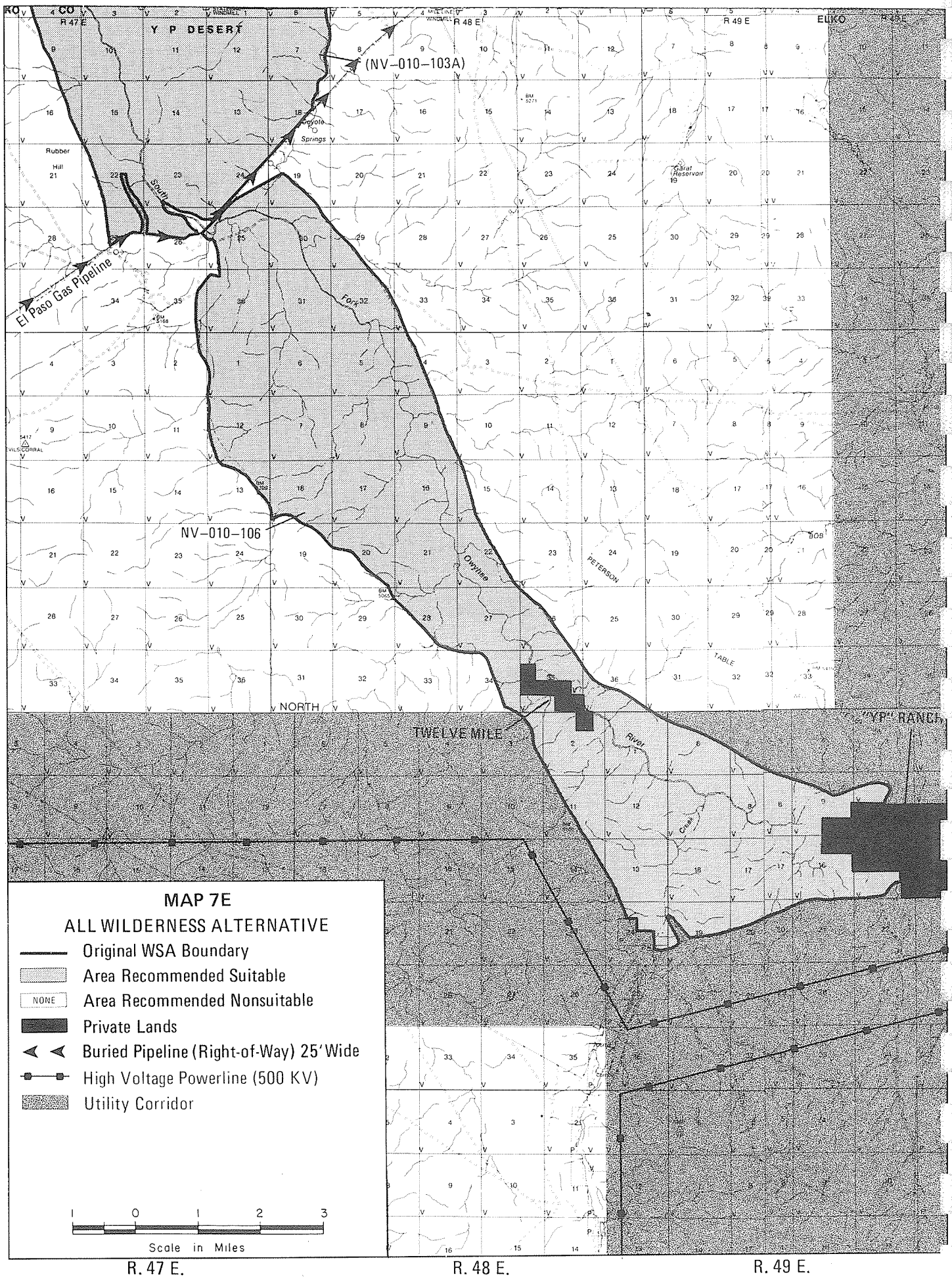


TABLE II-16

LANDS RECOMMENDED FOR ACQUISITION AND INCLUSION
IN THE SUITABLE BLM WILDERNESS RECOMMENDATION UNDER
THE ALL WILDERNESS ALTERNATIVE[1]

WSA	Lands Acquisition							Total Mineral Rights Acquisition (split-estate)
	Acres of Inholding Lands			Acres of Adjacent or Interlocked Lands			Total Land Acquisition	
	STATE	PRIVATE	TOTAL	STATE	PRIVATE	TOTAL		
OR-3-195 (ID-16-48B)	1,280	120	1,400	3,280	920	4,200	5,600	9,880
ID-16-48C	640	---	640	830	---	830	1,470	----
ID-16-49A	2,560	---	2,560	780	160	940	3,500	----
ID-16-49D	---	40	40	---	200	200	240	----
ID-111-49E	1,240	40	1,280	320	200	520	1,800	----
ID-16-52	---	---	--	800	---	800	800	----
ID-16-53 (NV-010-103A)	1,280	160	1,440	930	---	930	2,370	----
NV-010-106	---	280	280	---	---	---	280	----
TOTAL	7,000	640	7,640	6,940	1,480	8,420	16,060	9,880

[1] A total of 27,020 acres of state and private lands associated with the WSAs are being considered for acquisition (exchange or purchase) regardless of wilderness designation. This table shows that portion of the acreage which would be included in the suitable area should the transfer of ownership occur.

b. Recreation Management Actions

Management actions pertaining to WSA OR-3-195 are taken from the Owyhee National Wild River Management Plan.

1) Maintain the existing "45" dam (T.14S., R.5W., Sec. 25) to allow for boater passage and continued operation for irrigation purposes on the South Fork Owyhee River within Idaho. Dam maintenance would consist of replacing rock materials which become dislodged during annual high water flows. The dam site and nearby rock borrow pit are accessed by an established road.

2) Maintain existing public river access roads, acquire recreation easements to provide public access through private property and construct recreation facilities (vault toilets and interpretive signs) at boating launch sites.

Existing public access roads would be maintained at present construction levels at the following locations:

Owyhee River -
(a) Garat Crossing (Pipeline Crossing, Idaho) between WSAs ID-16-49D and 16-52;
(b) Battle Creek confluence between WSAs ID-16-49A, 16-49D and 111-49E;
(c) Crutcher's Crossing between WSAs ID-16-48B and ID-16-49A;
(d) Three Forks adjacent to WSA OR-3-195.
South Fork Owyhee River -
(a) Pipeline Crossing, Nevada, between WSAs NV-010-103A and NV-010-106;
(b) "45" Ranch between WSAs ID-16-48B, ID-16-48C and ID-16-53;
(c) Coyote Hole in WSA ID-16-53.

Acquire recreation easements at the "YP" Ranch at the southern tip of WSA NV-010-106, and at the "45" Ranch between WSAs ID-16-48B and ID-16-53 and maintain roads to provide public boating access into the suitable area. Recreationalists are currently obtaining permission from the private property owners at the time they launch their trips.

Construct vault toilets on BLM lands at the Garat Crossing in WSA ID-16-49D and at Three Forks in WSA OR-3-195. With the "YP" Ranch and "45" Ranch easements, vault toilets would be placed on private property within the South Fork Owyhee River Canyon. Each of the toilet sites would also have one interpretive/informational kiosk (small, roofed, sign structure) and registration box.

3) Close 152.7 miles of vehicle routes (interior or cherrystem roads and ways) to the river within the suitable area to general public recreational use. Vehicle routes lying outside or adjacent to the suitable area would not be closed. The miles of roads and ways closed within each WSA under the All Wilderness Alternative are shown in Table II-3. No off-road vehicle (ORV) traffic would be permitted in the suitable area.

4) Stabilize historic cultural sites (stone and wood buildings) on BLM lands (Maps 3F through 3J). These sites include:

a) WSA OR-3-195(ID-16-48B)
   State line: T.37S., R.48E., Sec. 23, Oregon
   Juniper Basin: T.14S., R.5W., Sec. 28, Idaho
b) WSA ID-16-53
   Bull Camp: T.16S., R.4W., Sec. 13, Idaho

Coordinate with state historic preservation offices and county historical societies to stabilize historic cultural sites on private inholdings and adjoining lands which are recommended for acquisition/exchange or easement purchase under the Proposed Action (Maps 3F through 3J). These sites include:

a) Five Bar: T.36S., R.47E., Secs. 15 and 16, Oregon
b) Crutcher's Crossing: T.13S., R.5W., Sec. 25, Idaho
c) Battle Creek confluence: T.14S., R.2W., Secs. 1 and 2, Idaho
d) Jarvis Creek confluence: T.14S., R.1W., Sec. 19, Idaho
e) Coyote Hole: T.15S., R.4W., Sec. 22, Idaho
f) Twelve Mile: T.46N., R.48E., Sec. 35, Nevada

Reconstruction of roofs on otherwise complete structures would be the primary stabilization measure. Stone structures with only portions of walls standing would be stabilized using compatible mortars where appropriate. Wood structures that are substantially intact (roofs in place) would be stabilized using applications of wood preservative solutions or replacement of rotted timbers, with sod roofing materials being replaced. Wood structures in collapsed, rotted or otherwise poor condition would be allowed to deteriorate naturally since there are no effective stabilization measures other than complete reconstruction. No cement foundations or other soil disturbing activities would occur around buildings. Access would be by vehicle along cherrystem roads or by helicopter.

5) Establish a carrying capacity for river running activities on the Owyhee River system at 182 trips per year with a total of 30,030 user days per year (Table II-4A and 4B). Establish no carrying capacity for backpacking/ horsepacking, hunting or other activities until such time as use levels warrant.

It is anticipated that river running would reach 37% (11,000 user days) of the carrying capacity in 20 years while other recreation activties would reach a total of 4,215 user days.

c. Rangeland Management (Vegetation, Livestock and Wildlife) Actions

1) Continue grazing use within the suitable area at approximately the level occurring at the time of designation. Livestock and wildlife use would be limited to an overall average of less than 50% utilization of available forage. A monitoring program would be used to ensure that the utilization level is not exceeded. Annual livestock use within the WSAs is expected to decrease to 27,148 AUMs within 20 years from a current use of 29,020 AUMs per annum. Existing and projected livestock use under the All Wilderness Alternative is shown on Table II-5A and 5B.

Livestock forage allocations of available forage (not to exceed 50% utilization) on the plateau areas would range between 95% and 97% with the remaining 3% to 5% allocated to wildlife. All forage (100%) would be allocated to wildlife in the canyonlands except in WSAs ID-16-48B, NV-010-103A and NV-010-106 (Table II-5C).

2) Conduct prescribed burning and seeding projects on 26,400 acres of the suitable area plateau (see Table II-6B for acreages specific to each WSA). Prescribed burning would occur over a period of ten years (approximately 2,640 acres per year). Prescribed burning would occur in the suitable area to manage species composition of native plant communities. Some seeding (aerial application only) of native grass species and forb species would occur only where natural revegetation is not expected to be sufficient to provide adequate ground cover. Additional forage as a result of prescribed burning and vegetation treatments would not be allocated to livestock use. The additional forage within the suitable area would be available for wildlife only.

3) Maintain existing range facilities in the wilderness area (Maps 3F through 3J). Existing developments within the WSAs are shown on Table II-7A and 7B. Motorized vehicles would be used for facility maintenance.

Reservoir maintenance would occur once every twenty years using bulldozers. Bulldozers would access reservoir sites along existing vehicle routes where available and walked cross-country from the nearest road when vehicle routes are not present. Different routes would be used to access the reservoir sites for each maintenance cycle. Maintenance of reservoir sites would include recontouring dams and dirt piles into crescent or oval shapes resulting in reservoir water impoundment and pit areas with a rounded or oval appearance.

Fence maintenance by vehicle would be permitted once each year at the beginning of the grazing season. Salting and all monitoring of livestock and rangeland facilities during the grazing season would be done from horseback. Emergency use of vehicles during mid-grazing seasons would be permitted on a case-by-case basis to repair damaged facilities or retrieve sick or injured animals.

4) Construct new rangeland facilities on the plateau of the suitable area. New rangeland facilities would include four reservoirs and nine miles of fenceline. Reservoirs would be constructed to blend with the surrounding landscape (low profile and rounded or oval shape). Fences would be constructed to wildlife specifications to allow passage. The number of new facilities for each WSA under the All Wilderness Alternative is shown on Table II-8. Reservoir construction would be done with bulldozers and fence construction would be done with other motorized equipment. Access to construction sites would be along existing vehicle routes where available or cross-country.

5) Conduct research studies on bighorn sheep. Motorized vehicles and helicopters would be authorized for trapping and transplanting bighorn sheep by state wildlife agencies.

d. Utility Corridor Actions

The existing 25-foot wide El Paso Gas Pipeline right-of-way traversing the Owyhee Canyonlands complex between WSAs ID-16-49D and ID-16-52 and between NV-010-103A and NV-010-106 (affecting a total of ten miles of WSA boundaries) would be maintained. Additional underground utilities would not be constructed adjacent to this right-of-way.

The Twelve Mile Corridor, projected under the Proposed Action and all other alternatives, would be routed around the southern boundary of WSA NV-010-106 within the five-mile wide planning corridor. The two overhead high voltage powerlines would be constructed to the same specifications as in the Proposed Action and other alternatives but would be located about one mile from the WSA boundary. Rerouting this corridor would add five miles to the length of one powerline. The other powerline length would remain the same.

e. Mineral/Energy Exploration Actions

The area designated as wilderness would be closed to mineral entry under the General Mining Law of 1872 subject to valid existing rights. No valid existing rights for mineral deposits are currently identified within the WSA complex nor are projected to be identified prior to wilderness designation. No mineral exploration activities are projected under the All Wilderness Alternative. The wilderness area would also be closed to oil and gas and geothermal leasing and associated exploration activities.

COMPARISON OF IMPACTS

A comparative impact summary for each alternative is presented in Table II-17 on the following three pages (II-80 through II-82).

TABLE II-17
COMPARATIVE IMPACT SUMMARY

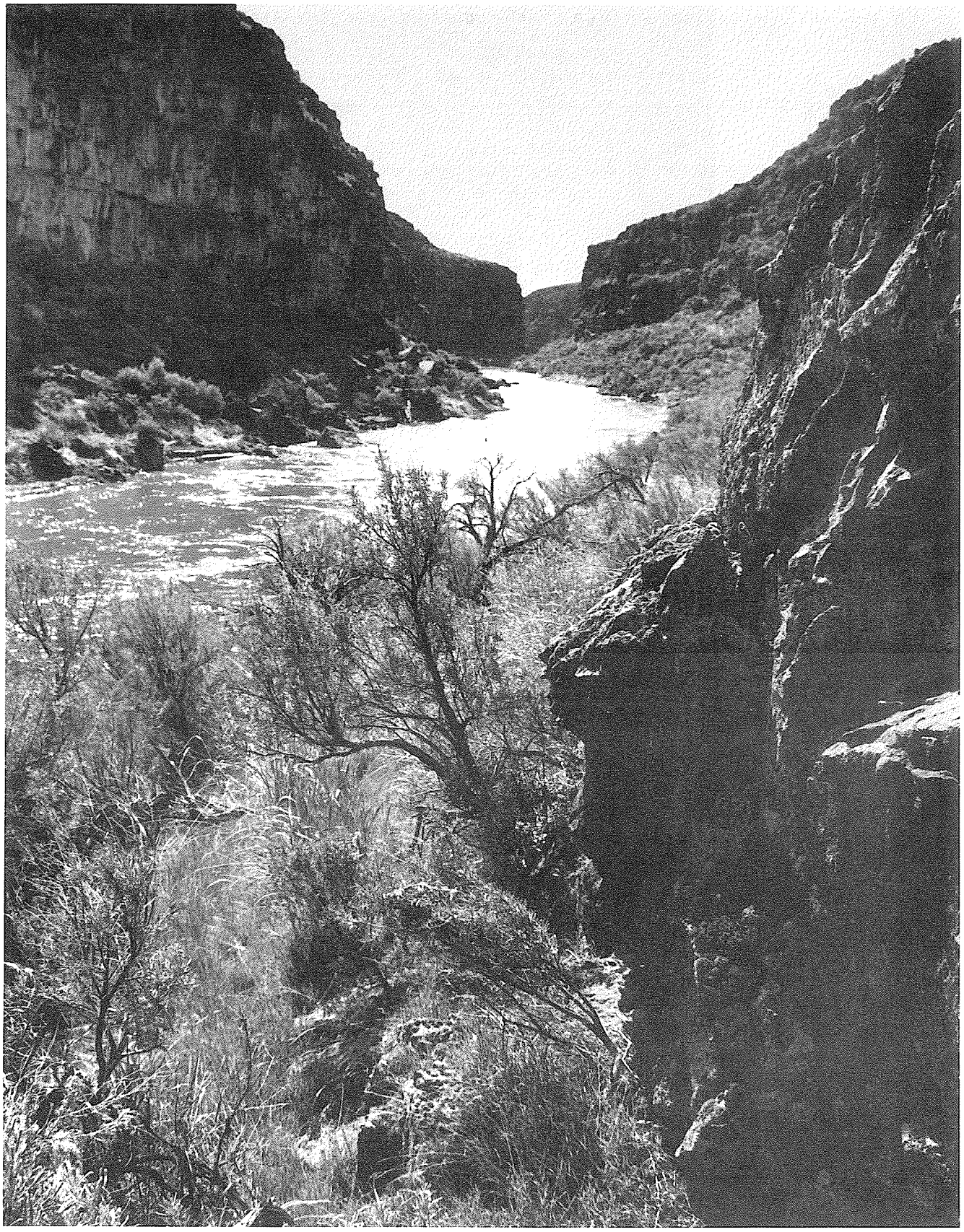
Environmental Issue	Proposed Action	No Action (No Wilderness) Alternative	No Action (No Wilderness) Subalternative	Canyonlands Wilderness Alternative	Wildlife Wilderness Alternative	All Wilderness Alternative
Impacts to Wilderness Values						
Naturalness Suitable Area	Improved overall on 288,660 acres: grazing systems.	--	--	--	Improved overall on 203,010 acres: grazing systems.	Improved overall on 316,372 acres: grazing systems.
	Improved on 20,800 acres:prescribed burning.	--	--	--	Improved on 15,200 acres:prescribed burning.	Improved on 26,400 acres:prescribed burning.
	Improved along 106 miles:road closures.	--	--	Improved along 6 miles:road closures.	Improved along 76 miles:road closures.	Improved along 153 miles:road closures.
	Reduced on 3,800 acres for one year:oil and gas exploration.	--	--	--	Reduced on 3,800 acres for one year:oil and gas exploration.	--
	Permanent loss on 515 acres:pipeline development.	--	--	Permanent loss on 120 acres:pipeline development.	Permanent loss on 195 acres:pipeline development.	--
	Reduced on 130 acres:new reservoirs and fences.	--	--	--	Reduced on 130 acres:new reservoirs and fences.	Reduced on 190 acres:new reservoirs and fences.
Nonsuitable Area	Reduced on 21,680 acres for 20 years:vegetative treatments.	Reduced on 35,090 acres for 20 years:vegetative treatments.	Reduced on 35,090 acres for 20 years:vegetative treatments.	Reduced on 35,090 acres for 20 years:vegetative treatments.	Reduced on 34,690 acres for 20 years:vegetative treatments.	--
	Reduced on 9,500 acres for one year:oil and gas exploration.	Reduced on 13,300 acres for one year:oil and gas exploration.	Reduced on 13,300 acres for one year:oil and gas exploration.	Reduced on 13,300 acres for one year:oil and gas exploration.	Reduced on 9,500 acres for one year:oil and gas exploration.	--
	Reduced on 185 acres:new reser- and fences.	Reduced on 415 acres:new reser- and fences.	Reduced on 415 acres:new reser- and fences.	Reduced on 415 acres:new reser- and fences.	Reduced on 210 acres:new reser- and fences.	--
	Permanent loss on 10,245 acres: pipeline 2,895 powerline 7,350	Permanent loss on 10,332 acres: pipeline 2,982 powerline 7,350	Permanent loss on 10,760 acres: pipeline 3,410 powerline 7,350	Permanent loss on 10,640 acres: pipeline 3,290 powerline 7,350	Permanent loss on 10,565 acres: pipeline 3,215 powerline 7,350	--
	--	Reduced on 10,000 acres for 20 years:mineral and geothermal exploration.	Reduced on 10,000 acres for 20 years:mineral and geothermal exploration.	Reduced on 7,800 acres for 20 years:mineral exploration.	Reduced on 320 acres for 20 years:mineral exploration.	--
Total	Enhanced or retained: 410,802 acres Reduced or lost: 37,540 acres.	Enhanced or retained: 385,545 acres Reduced or lost: 60,522 acres.	Enhanced or retained: 385,117 acres Reduced or lost: 60,950 acres.	Enhanced or retained: 387,317 acres Reduced or lost: 58,750 acres.	Enhanced or retained: 396,417 acres Reduced or lost: 50,750 acres.	Enhanced or retained: 450,272 acres Reduced or lost: None.
Solitude Opportunities						
Suitable Area	Increased along 106 miles:road closures.	--	--	Increased along 6 miles:road closures.	Increased along 76 miles:road closures.	Increased along 153 miles:road closures.
	Reduced on 515 acres for 1 1/2 months:pipeline construction.	--	--	Reduced on 120 acres for 1 1/2 months:pipeline construction.	Reduced on 195 acres for 1 1/2 months:pipeline construction.	--
	Reduced on 3,800 acres for one year:oil and gas exploration.	--	--	--	Reduced on 3,800 acres for one year:oil and gas exploration.	--
Nonsuitable Area	Reduced on 2,895 acres for 1 1/2 months:pipeline construction.	Reduced on 2,982 acres for 1 1/2 months:pipeline construction.	Reduced on 3,410 acres for 1 1/2 months:pipeline construction.	Reduced on 3,290 acres for 1 1/2 months:pipeline construction.	Reduced on 3,215 acres for 1 1/2 months:pipeline construction.	--
	Reduced on 3,675 acres for 1 1/2 months:powerline construction.	Reduced on 3,675 acres for 1 1/2 months:powerline construction.	Reduced on 3,675 acres for 1 1/2 months:powerline construction.	Reduced on 3,675 acres for 1 1/2 months:powerline construction.	Reduced on 3,675 acres for 1 1/2 months:powerline construction.	--
	Reduced on 9,500 acres for one year:oil and gas exploration.	Reduced on 13,300 acres for one year:oil and gas exploration.	Reduced on 13,300 acres for one year:oil and gas exploration.	Reduced on 13,300 acres for one year:oil and gas exploration.	Reduced on 9,500 acres for one year:oil and gas exploration.	--

TABLE II-17
COMPARATIVE IMPACT SUMMARY (Continued)

Environmental Issue	Proposed Action	No Action (No Wilderness) Alternative	No Action (No Wilderness) Subalternative	Canyonlands Wilderness Alternative	Wildlife Wilderness Alternative	All Wilderness Alternative
	--	Reduced on 10,000 acres for one year:mineral and geothermal exploration.	Reduced on 10,000 acres for one year:mineral and geothermal exploration.	Reduced on 7,800 acres for one year:mineral exploration.	Reduced on 320 acres for one year:mineral exploration.	--
Primitive Recreation Opportunities						
Suitable Area	Enhanced along 106 miles:road closures.	--	--	Enhanced along 6 miles:road closures.	Enhanced along 76 miles:road closures.	Enhanced along 153 miles:road closures.
	Permanently reduced on 515 acres: pipeline development.	--	--	Permanently reduced on 120 acres: pipeline development.	Permanently reduced on 195 acres: pipeline development.	--
	Reduced on 3,800 acres for one year: oil and gas exploration.	--	--	--	Reduced on 3,800 acres for one year: oil and gas exploration.	--
Nonsuitable Area	Permanently reduced on 2,895 acres: pipeline development.	Permanently reduced on 2,982 acres: pipeline development.	Permanently reduced on 3,410 acres: pipeline development.	Permanently reduced on 3,290 acres: pipeline development.	Permanently reduced on 3,215 acres: pipeline development.	--
	Permanently reduced on 7,350 acres: powerline development.	Permanently reduced on 7,350 acres: powerline development.	Permanently reduced on 7,350 acres: powerline development.	Permanently reduced on 7,350 acres: powerline development.	Permanently reduced on 7,350 acres: powerline development.	--
	Reduced on 21,680 acres for 20 years: drill seeding.	Reduced on 35,090 acres for 20 years: drill seeding.	Reduced on 35,090 acres for 20 years: drill seeding.	Reduced on 35,090 acres for 20 years: drill seeding.	Reduced on 34,690 acres for 20 years: drill seeding.	--
	Reduced on 9,500 acres for one year: oil and gas exploration.	Reduced on 13,300 acres for one year: oil and gas exploration.	Reduced on 13,300 acres for one year: oil and gas exploration.	Reduced on 13,300 acres for one year: oil and gas exploration.	Reduced on 13,300 acres for one year: oil and gas exploration.	--
	--	Reduced on 10,000 acres for 20 years: mineral and geothermal exploration.	Reduced on 10,000 acres for 20 years: mineral and geothermal exploration.	Reduced on 7,800 acres for 20 years: mineral exploration.	Reduced on 320 acres for 20 years: mineral exploration.	
Special Features (Bighorn Sheep)	Population in 20 years: 900-1200. Reduced disturbance:road closures near canyon rims.	Population in 20 years: 900-1200. Increased disturbance:no road closures and increased recreation use.	Population in 20 years: 900-1200. Increased disturbance:no road closures and increased recreation use.	Population in 20 years: 900-1200. Reduced disturbance:road closures near canyon rims.	Population in 20 years: 900-1200. Reduced disturbance:road closures near canyon rims.	Population in 20 years: 900-1200. Reduced disturbance:road closures near canyon rims.
	Disturbance for 1 1/2 months: pipeline construction.	--	Disturbance for 1 1/2 months: pipeline construction.	Disturbance for 1 1/2 months: pipeline construction.	Disturbance for 1 1/2 months: pipeline construction.	--
	--	Disturbance for one year:mining (23 sites) and geothermal (2 sites) exploration.	Disturbance for one year:mining (23 sites) and geothermal (2 sites) exploration.	Disturbance for one year:mining (19 sites) exploration.	Disturbance for one year:mining (2 sites) exploration.	--
Special Features (Cultural Values)	Reduced vandalism :road closures.	Increased vandalism:no road closures.	Increased vandalism:no road closures.	Reduced vandalism :road closures.	Reduced vandalism :road closures.	Reduced vandalism :road closures.
	No change in livestock trampling damage.	Significant increase in livestock trampling.	Significant increase in livestock trampling.	Significant increase in livestock trampling.	Slight decrease in livestock trampling.	Moderate decrease in livestock trampling.
Impacts to Native Vegetation	Good condition retained:119,135 acres.	Good condition retained:119,095 acres.	Good condition retained:119,095 acres.	Good condition retained:119,095 acres.	Good condition retained:119,095 acres.	Good condition retained:119,095 acres.
	Poor/fair condition improved: 325,457 acres.	Poor/fair condition improved: 320,122 acres.	Poor/fair condition improved: 320,122 acres.	Poor/fair condition improved: 320,122 acres.	Poor/fair condition improved: 321,422 acres.	Poor/fair condition improved: 331,177 acres.
	Displaced:3,750 acres to seedings.	Displaced:6,850 acres to seedings.	Displaced:6,850 acres to seedings.	Displaced:6,850 acres to seedings.	Displaced:6,650 acres to seedings.	Displaced: 0 no seedings.
	Lost:45 acres to developments.	Lost:46 acres to developments.	Lost:51 acres to developments.	Lost:51 acres to developments.	Lost:45 acres to developments.	Lost:20 acres to developments.
	Disturbed and recovered:56 acres:energy and mineral actions.	Disturbed and recovered:78 acres:energy and mineral actions.	Disturbed and recovered:84 acres:energy and mineral actions.	Disturbed and recovered:71 acres:energy and mineral actions.	Disturbed and recovered:58 acres energy and mineral actions.	Disturbed and recovered:none.
	Recovery from road closures: Partial:50 miles Full:56 miles.	Recovery from road closures: Partial:0 Full:0	Recovery from road closures: Partial:0 Full:0	Recovery from road closures: Partial:0 Full:6 miles.	Recovery from road closures: Partial:35 miles. Full:47 miles.	Recovery from road closures: Partial:73 miles. Full:79 miles.

TABLE II-17
COMPARATIVE IMPACT SUMMARY (Continued)

Environmental Issue	Proposed Action	No Action (No Wilderness) Alternative	No Action (No Wilderness) Subalternative	Canyonlands Wilderness Alternative	Wildlife Wilderness Alternative	All Wilderness Alternative
Impacts to Wildlife (projected 20 year population changes)						
Suitable Area	Mule deer: +15% to 25% Pronghorn: +15% to 25% Sage Grouse: +10% to 15%	-- -- --	-- -- --	Mule deer: no change Pronghorn: no change Sage Grouse: no change	Mule deer: +15% to 20% Pronghorn: +15% to 20% Sage Grouse: +10% to 15%	Mule deer: +25% to 30% Pronghorn: +25% to 30% Sage Grouse: +20%
Nonsuitable Area	Mule Deer: +5% Pronghorn: +5% Sage Grouse: -10% --	Mule Deer: -15% Pronghorn: -15% Sage Grouse: -15% Trout: -50%	Mule Deer: -15% Pronghorn: -15% Sage Grouse: -15% Trout: -50%	Mule Deer: -10% Pronghorn: -10% Sage Grouse: -10% Trout: -50%	Mule Deer: +15% Pronghorn: +15% Sage Grouse: +10% --	-- -- -- --
Impacts to Semi-primitive Recreation (20 yr. projection in user days)(vehicle use opportunities)	Hunting: 2400 Backpacking: 235 Other: 1800 Total: 4435 Lost vehicle use on 106 miles. New vehicle routes from powerlines in Nevada.	Hunting: 2900 Backpacking: 280 Other: 1220 Total: 4400 No lost vehicle use. New vehicle routes from powerlines in Nevada.	Hunting: 2900 Backpacking: 280 Other: 1220 Total: 4400 No lost vehicle use. New vehicle routes from powerlines in Nevada.	Hunting: 2860 Backpacking: 280 Other: 1120 Total: 4260 Lost vehicle use on 6 miles. New vehicle routes from powerlines in Nevada.	Hunting: 2600 Backpacking: 245 Other: 1800 Total: 4645 Lost vehicle use on 76 miles. New vehicle routes from powerlines in Nevada.	Hunting: 2200 Backpacking: 215 Other: 1800 Total: 4215 Lost vehicle use on 153 miles. No new vehicle routes.
Impacts to Livestock Use (20 yr. projected changes) (new range developments)	Affected Allotments: +16% WSA Boundaries: +5% Reservoirs: 10 Fence miles: 9	Affected Allotments: +29% WSA Boundaries: +51% Reservoirs: 13 Fence miles: 9	Affected Allotments: +29% WSA Boundaries: +51% Reservoirs: 13 Fence miles: 9	Affected Allotments: +29% WSA Boundaries: +42% Reservoirs: 13 Fence miles: 9	Affected Allotments: +3% WSA Boundaries: -1% Reservoirs: 10 Fence miles: 9	Affected Allotments: +1% WSA Boundaries: -6% Reservoirs: 4 Fence miles: 9
Impacts to Soil Erosion (Projected Changes in broad based rates)						
Suitable Area	Decrease 10%	--	--	No change	Decrease 5% to 10%	Decrease 10%
Nonsuitable Area	No change	Increase 10% to 20%	Increase 10% to 20%	Increase 10% to 15%	Decrease 5%to 10%	--
Impacts to Water Quality (Projected changes in suspended sediment)						
Suitable Area Nonsuitable Area	Reduced 5% No change	-- Increased 10% to 20%	-- Increased 10% to 20%	No change Increased 10% to 12%	Reduced 5% Reduced 5%	Reduced 10% --
Impact to Local Income (Projected increases in 20 years)	Livestock: 43% Recreation: 298% Total: 0.3%	Livestock: 58% Recreation: 297% Total: 0.4%	Livestock: 58% Recreation: 297% Total: 0.4%	Livestock: 58% Recreation: 294% Total: 0.4%	Livestock: 25% Recreation: 303% Total: 0.3%	Livestock: 23% Recreation: 293% Total: 0.2%
Impacts to Local Employment (Projected increases in 20 years)	Livestock: 43% Recreation: 152% Total: 0.3%	Livestock: 58% Recreation: 151% Total: 0.4%	Livestock: 58% Recreation: 151% Total: 0.4%	Livestock: 58% Recreation: 144% Total: 0.4%	Livestock: 25% Recreation: 163% Total: 0.3%	Livestock: 23% Recreation: 142% Total: 0.3%
Impacts to Overhead Transmission Line Development	--	--	--	--	--	Transmission line cost would increase $2,000,000



South Fork Owyhee River Canyon

WSA NV-010-106

CHAPTER III

South Fork Owyhee River Canyon

WSA NV-010-103A

CHAPTER III
DESCRIPTION OF AFFECTED ENVIRONMENT

The description of the affected environment covers those resource concerns which were identified as issues by the public, the BLM and other management agencies. Resource characteristics within all wilderness study areas (WSAs) are very similar; therefore, resource descriptions refer to all WSAs unless otherwise specified. Specific resource characteristics of the WSAs are addressed under each resource heading.

WILDERNESS CHARACTERISTICS

The BLM completed a wilderness inventory of roadless areas along the upper Owyhee River in 1982 using procedures outlined in the BLM Wilderness Inventory Handbook (1978). From this inventory, eight WSAs were identified. Each WSA contains mandatory wilderness characteristics (size; naturalness; solitude and/or primitive recreation opportunities) and special (supplemental) wilderness features which meet the wilderness criteria established by the Wilderness Act of 1964.

Size and Physical Aspect

The Owyhee River WSAs are adjoining areas encompassing 697 square miles (446,067 acres) of the high desert plateau and canyonlands of Oregon, Idaho and Nevada. The eight WSAs range in size from 9,990 acres to 224,400 acres. They stretch continuously over a vast, flat to gently rolling sagebrush plateau lying at an elevation of 4,000 to 5,700 feet. The WSAs are separated from one another only by several primitive (low-standard) roads and small isolated parcels of state and/or private land.

The plateau within the WSAs is sharply dissected by 281 miles of meandering, sheer-walled canyons carved by the Owyhee River and its tributary streams. Though significant variations in canyon depth occur frequently throughout the river system because of changes in the topography of surrounding plateau lands, the canyons generally increase in depth in a downstream direction in Idaho and Nevada. In the southernmost and easternmost reaches of the WSAs of Nevada and Idaho the canyons are 100 to 300 feet deep. Flowing northwestward at an average gradient of ten feet per mile, the Owyhee River system has carved a canyon to a depth of 1,000 feet by the time it reaches the Oregon-Idaho stateline. Downstream from the stateline, the depth of the canyon slowly decreases to about 500 feet by the time the river reaches the northern tip of the Oregon WSA. The loss of canyon depth in Oregon is due to a gradual decline in the elevation of surrounding plateau lands.

Each of the WSAs has plateau lands surrounding an inner core of canyonlands. Plateau topography accounts for 74% to 94% of the land area and canyonlands occupy 6% to 26%. In all cases, the canyons run lengthwise through the WSAs. In general, the rimrock of the canyons lies one-half to two miles from the WSAs' boundaries. There are two notable exceptions: the southeast plateau area of Oregon WSA OR-3-195 stretches for a distance of eight to ten miles and the western plateau area of WSA ID-16-48C extends as

far as four miles from the canyon rimrock. Also, the north central boundary of WSA OR-3-195 is at or within the rimrock of the Owyhee River Canyon because of state land ownership.

There is little difference between the physical aspect or natural features of the WSAs other than their overall size and the variations in erosional features associated with rhyolite and basalt rock. A brief description of each WSA is given below. A summary of the size and physical aspect of each WSA is shown in Table III-1.

Table III-1

WSA SIZE AND PHYSICAL ASPECT

WSA Name/Number	Size (Acres)			Canyonlands			Plateau Lands		
				Canyon Length (mi)		Canyon Depth (Feet)	Elevations (Feet)	WSA Width (miles)	WSA Length (miles)
	Total	Canyons	Plateau	Owyhee River	Tributary Streams				
Owyhee River Canyon OR-3-195 (ID-16-48B)	224,400	46,900	177,500	84	42	500-1,000	4,000-5,500	1-10	78
Little Owyhee River ID-16-48C	24,600	6,000	18,600	0	11	400-800	5,000-5,300	1.5-5	11
Owyhee River-Deep Creek ID-16-49A	70,160	18,000	52,160	29	26	200-600	4,200-5,400	2-5	18.5
Yatahoney Creek ID-16-49D	9,990	2,000	7,990	8	5	400-500	5,000-5,300	2-4.75	4.5
Battle Creek ID-111-49E	31,540	2,200	29,340	0	19	200-400	5,500-5,700	1.25-5	16
Juniper Creek ID-16-52	13,150	3,200	9,950	13	3	300-500	5,200-5,300	2.5-4	7.5
S. F. Owyhee River ID-16-53(NV-010-103A)	50,352	9,000	41,352	17	3	500-800	4,900-5,500	4-6	17
Owyhee Canyon NV-010-106	21,875	2,800	19,075	18	3	100-300	5,000-5,200	1.5-3.5	18
TOTAL	446,067	90,100	355,967	169	112	---	---	---	---

1) Owyhee River Canyon WSA (Oregon/Idaho): OR-3-195 (ID-16-48B)

The WSA is 214,020 acres in size, of which 180,320 acres are in Oregon and 33,700 acres are in Idaho. It is 78 miles long and varies in width from one to ten miles. The plateau within the WSA has flat to gently rolling topography at an elevation of 4,000 to 5,500 feet. The plateau is dissected by 126 miles of canyons. Through these canyons flow 72 miles of the Owyhee River, 2 miles of the East Fork Owyhee River and 10 miles of the South Fork Owyhee River. The canyons of the Owyhee River system are 500 to 1,000 feet deep, narrow and very meandering. In some places, sheer walls of rhyolite (volcanic) rock rise directly from the river bed to a basalt (volcanic) rimrock. Atop the walls of rhyolite are often clusters of numerous rock spires or pinnacles. In most places, small talus slopes are nestled between rock monoliths and the river's edge. In the canyon of the South Fork Owyhee

River a broad outer canyon of talus slopes and sheer-walled basalt rimrock surrounds a narrow, vertical-walled rhyolite inner canyon. Other comparable canyons of the WSA are Louse Canyon carved by the West Little Owyhee River, Toppin Creek Canyon, and Antelope Creek Canyon. These canyons are nearly as deep as the Owyhee River Canyon, but much narrower. They too are comprised of vertical-walled rhyolite rock monoliths and spires.

2) Little Owyhee River WSA (Idaho): ID-16-48C

The WSA is 24,600 acres in size. It is 11 miles long and one and a half to five miles wide. The plateau within the WSA has flat to gently rolling topography at an elevation of about 5,000 to 5,300 feet. The plateau is dissected by 11 miles of canyons. Through this canyon flows the East Little Owyhee River. The canyon is 400 to 800 feet deep, narrow and somewhat meandering. In most places, steep talus slopes comprised of rhyolite lie below a 50 foot, vertical-walled basalt rimrock. The lower elevations of the talus slopes are occasionally interrupted by rock pinnacles or small sheer walls of rhyolite bedrock.

3) Owyhee River - Deep Creek WSA (Idaho): ID-16-49A

The WSA is 70,160 acres in size. It is 18.5 miles long (with a 8.5 mile long northern thumb) and is two to five miles in width. The plateau within the WSA has flat to hilly topography lying at an elevation of about 4,200 to 5,400 feet. The plateau is dissected by 55 miles of canyons. Through these canyons flow 29 miles of the East Fork Owyhee River. Other major water courses of the WSA with canyons of comparable depth to the East Fork Owyhee River Canyon include Deep Creek, Dickshooter Creek and Red Canyon Creek. The canyons are 200 to 600 feet deep, narrow and very meandering. In most places, small talus slopes are nestled between rock monoliths and the river's or stream's shoreline. Canyon sections with sheer walls are frequently interrupted by large steep talus slopes. In the western portions of the WSA steep talus slopes capped with a sheer basalt rimrock surround a vertical-walled rhyolite inner canyon. The walls of the inner canyon rise directly out of the water on both sides of the river and are topped with numerous rock spires.

4) Yatahoney Creek WSA (Idaho): ID-16-49D

The WSA is 9,990 acres in size. It is four and a half miles long and varies from two to four and three-quarter miles wide. The plateau within the WSA has flat to gently rolling topography at an elevation of 5,000 to 5,300 feet. The plateau is dissected by 13 miles of canyons. Through these canyons flow eight miles of the Owyhee River. The East Fork Owyhee River Canyon contains a one mile long Oxbow Canyon which has been isolated from the river. The major tributary canyon of the WSA was formed by Yatahoney Creek. The canyon of the East Fork Owyhee River is 400 to 500 feet deep, narrow, and very meandering. In some places, sheer walls of rhyolitic rock rise directly from the river bed. In most places, small talus slopes are nestled between the rock monoliths and the river's edge. Canyon sections with sheer walls are frequently interrupted by large steep talus slopes.

5) Battle Creek WSA (Idaho): ID-111-49E

The WSA is 31,540 acres in size. It is 16 miles long and varies from one and a quarter to five miles wide. The plateau within the WSA has flat to gently rolling topography lying at an elevation of about 5,300 to 5,700 feet. The plateau is dissected by 19 miles of canyons. Through these canyons flow 16 miles of Battle Creek. The Battle Creek Canyon is 200 to 400 feet deep, narrow and very meandering. In many places, sheer walls of rhyolitic rock rise directly from the stream bed. Canyon sections with sheer walls are frequently interrupted by steep talus slopes.

6) Juniper Creek WSA (Idaho): ID-16-52

The WSA is 13,150 acres in size. It is seven and a half miles long and varies from two and a half to four miles wide. The plateau within the WSA consists mostly of a "bowled" basin lying at an elevation of about 5,200 feet. In the western portion of the WSA the basin gives way to a 150 foot rimrock. Atop the rimrock are additional flat plateau lands. The plateau basin is dissected by 16 miles of canyons. Through these canyons flow 13 miles of the East Fork Owyhee River. The other major water course in the WSA is Juniper Creek. The canyon of the East Fork Owyhee River is 300 to 500 feet deep, narrow and very meandering. In the eastern portion of the WSA the canyon consists primarily of vertical walls of rhyolite rock. In the western portion, where the river cuts through the plateau rimrock, steep talus slopes capped with a sheer basalt rimrock surround a vertical-walled rhyolite inner canyon.

7) South Fork Owyhee River WSA (Idaho/Nevada): ID-16-53 (NV-010-103A)

The WSA is 50,352 acres in size, of which 42,510 acres lie in Idaho and 7,842 acres lie in Nevada. It is 17 miles long and from four to six miles wide. The plateau within the WSA has flat to hilly topography at an elevation of about 4,900 to 5,500 feet. In the northern third of the area the plateau consists of several north-south running ridges and swales which break away into small canyons draining into the South Fork Owyhee River Canyon. In the southern two thirds of the area the plateau is relatively flat. The plateau is dissected by 20 miles of canyons. Through these canyons flow 17 miles of the South Fork Owyhee River. The canyon of the South Fork is 500 to 800 feet deep, narrow and very meandering. In the southern two thirds of the WSA the canyon consists of long, steep talus slopes and rock outcrops lying below a vertical-walled basalt rimrock. In the lower elevations of the talus slopes (usually along the river's edge), the talus slopes are frequently interrupted by sheer walls of rhyolite bedrock. In the northern third of the WSA the sheer walls of rhyolite predominate over intermixed talus slopes. In some places, the canyon walls rise directly from the river bed. In most places, small talus slopes are nestled between the rock monoliths and the river's shoreline. Atop the walls are numerous rock spires or pinnacles.

8) Owyhee Canyon WSA (Nevada): NV-010-106

The WSA is 21,875 acres in size. It is 18 miles long and varies from one and a half to three and a half miles wide. The plateau in the western two-thirds of the WSA consists of gently rolling topography lying at an elevation of about 5,000 to 5,200 feet. In the eastern third of the WSA the plateau breaks away along a meandering basalt rimrock into a basin 100 to 200 feet deep. Cutting through this basin along the eastern periphery of the WSA is the 18 mile long South Fork Owyhee River Canyon. The canyon is 100 to 300 feet deep, narrow and very meandering. It consists mostly of sheer or vertical walls of blocky, basalt and rhyolite. The tributary canyon of Four Mile Creek also cuts a three-mile long canyon across the southwest portion of the WSA. In the deeper northern half of the Owyhee River Canyon, sheer cliffs are almost continuous. Nestled between the rock walls and the river's edge are small talus slopes. In the shallower southern half of the Owyhee River Canyon the talus slopes are intermixed with rock walls which often reach to the canyon's rim.

Naturalness

All of the Owyhee Canyonlands WSAs possess a high degree of naturalness. Imprints of man are present in each WSA but they are substantially unnoticeable (see Maps 3F through 3J). Imprints are widely scattered and consist of 1) range developments including small stock ponds or reservoirs, barbed wire fences, and water troughs associated with springs, 2) primitive vehicle routes including 2-wheel tracks (ways) and minimally constructed cherrystem roads, 3) ruins or remnants of old log or stone buildings of historic and cultural value, and 4) the El Paso gas pipeline.

Most imprints occur on the plateau and consist of small stock ponds, many of which are serviced by primitive roads or ways. Within the canyons, imprints are limited to historic ruins and WSA boundary roads which supply access to or across the rivers. The historic sites and/or boundary roads which lie between WSAs are encountered from one to three days apart while floating the rivers. One developed ranch site called the "45" Ranch is located in the South Fork Owyhee River Canyon between WSA ID-16-48B, ID-16-48C and ID-16-53.

The only man-made obstruction of the Owyhee River system within or adjoining the WSA complex is the "45" Dam on the South Fork Owyhee River which provides irrigation water to private pasture lands along the South Fork Owyhee River between WSAs ID-16-48B and 16-53. The dam site is visible within the northernmost canyon area of WSA ID-16-53. The dam underwent major reconstruction in 1986 and 1987 to stabilize it against continued damage from high volume spring flows, to ensure the safe passage of whitewater rafts, kayaks and/or canoes, and to rehabilitate impacts to the naturalness of the dam site from associated borrow pits (areas where rock materials had been removed from the canyon's talus slopes to construct the original dam). The site is accessed by an established road.

The El Paso gas pipeline is located between WSAs and reduces naturalness on the adjacent WSAs. The El Paso gas pipeline causes localized degradation of naturalness because of the quality of rehabilitation work done during its construction (prior to the passage of the Federal Land Policy and Management Act 1976). Naturalness is most seriously degraded at the pipeline's crossing of the East Fork Owyhee River between WSAs ID-16-49D and 16-52 and the South Fork Owyhee River between Nevada WSAs NV-010-103A and 010-106. The pipeline locally impacts the naturalness of a small portion of these WSAs.

The location, number and relative distribution of man's imprints make for infrequent visual encounters. Visual contact with range developments (see Livestock Grazing, Table III-8) and vehicle routes (see RECREATION USE, Table III-7) is extremely limited and of minimal impact because of the limited soil and vegetation disturbance associated with their construction, the small size and/or low profile of the developments, and the presence of topographic and/or vegetation screening. On the plateau, imprints are generally obscured by sagebrush or small changes in topography within one hundred feet to several hundred yards. In the canyons, meandering walls and talus slopes screen WSA boundary roads at very close distances. Field studies conducted in 1981 documented that less than eight percent of any WSA is minimally impacted by man's imprints. No impact was judged to be significant in each WSA as a whole. The amount of visual impact from man's imprints within any one WSA is shown below.

WSA OR-3-195 (ID-16-48B)	8%
WSA ID-16-48C	1%
WSA ID-16-49A	6%
WSA ID-16-49D	3%
WSA ID-111-49E	1%
WSA ID-16-52	2%
WSA ID-16-53 (NV-010-103A)	2%
WSA NV-010-106	1%

Solitude Opportunities

All of the Owyhee Canyonlands WSAs possess similar natural features which provide outstanding opportunities for solitude. When the WSAs are considered as a group, the overall opportunities for solitude are of exceptionally high quality.

The outstanding opportunities for solitude in each WSA are attributed to the isolated, intimate seclusion of canyonlands and the view of vast acreages of open plateau lands.

The canyons of the WSAs are typically deep, narrow and very meandering. The meandering character of the canyon walls and river beds provide excellent topographic screening between visitor groups traveling close together. River level views up and down the canyons are limited to .25 to .5 miles. The depth of the canyons combined with limited viewing distances creates a tremendous sense of seclusion or separation from the rest of the world.

The length of canyons involved in each WSA allows visitor groups to readily find campsites which are out of sight and sound of other groups. Furthermore, the length of canyons provides ample time and distance for visitor groups to adjust their rates of travel and campsite locations to avoid interaction with other groups while floating or hiking. Along the 169 miles of river within the WSA, there are hundreds of campsites. There are also many campsites in the tributary canyons. Because of the characteristics of these canyons, outstanding opportunities for solitude can be maintained by simply controlling the rate of visitor entry into the canyons.

The flat to rolling topography and low vegetation of the plateau lands surrounding the canyons allows for the viewing of tens of square miles of a vast, open, seemingly undisturbed desert landscape within each WSA. Due to the continuation of the vast flat expanses of the Owyhee Uplands surrounding the WSAs, it is possible to see hundreds to thousands of square miles of additional desert landscape stretching from the Steens Mountains in Oregon to Juniper Mountain in Idaho and southward to the Bull Run Mountains of Nevada. These vast open spaces instill a sense of complete separation from civilization.

Primitive Recreation Opportunities

The natural features which provide outstanding opportunities for solitude also contribute to outstanding opportunities for primitive and unconfined recreation in all WSAs but the Little Owyhee River WSA (ID-16-48C).

The canyons and plateau of the Owyhee Canyonlands WSA complex provide a diversity of rugged landforms and many miles of a desert river ecosystem rich in scenic, wildlife, vegetation and cultural resources. These features attract people interested in achieving primitive recreational experiences in river running and/or backpacking activities and in associated secondary activities of sightseeing, outdoor photography, wildlife viewing, botanical studies and fishing. Because of the quality of these secondary activities (which are associated with special features), river running opportunities are of exceptionally high quality and considered of national significance.

The miles of canyons, their diversely and severely eroded rock landscapes, their steep slopes, and the dominance of subdued brown and red rock all combine to create a sense of isolation or solitude; thereby enhancing the primitive recreation experience. Visitors traveling in or near the canyons are constantly aware of the forces of nature that have formed the severely eroded landscapes. Floating or hiking along the rivers and tributary streams gives one a sense of participation in the movements of a natural force. The challenge and excitement of whitewater rapids as well as several mandatory portages of rock falls add significantly to the challenge of the boating experience. Hiking the rugged canyons and plateau without the aid of established trails also provides a more natural and arduous recreational challenge which heightens the primitive experience.

Whitewater river running opportunities are available on both the Owyhee River and South Fork Owyhee River in six of the WSAs. There are no realistic boating opportunities in the Battle Creek WSA (ID-111-49E) because of low water flows and extremely difficult access to put-in points, however, hiking along the twisted water courses and monolithic rock formations of Battle Creek Canyon offer outstanding opportunities for backpacking equal to or greater than those found in the Owyhee River and South Fork Owyhee River Canyons.

There are neither whitewater boating opportunities nor outstanding backpacking opportunities found in the Little Owyhee River WSA (ID-16-48C). Contrary to its name, the East Little Owyhee River is an intermittent stream which cannot be boated. There are few natural features which would attract hikers into the East Little Owyhee River Canyon except for the first few miles upstream from its junction with the South Fork Owyhee River Canyon. The natural features generally lack the diversity of rock formations which make the other Owyhee Canyonlands WSAs so scenic. Much of the canyon consists of steep talus slopes rather than the mixture of rock monoliths, rock spires and talus slopes found in the other WSAs. Poor water quality and radical water flow fluctuations of the stream leaves it mostly lacking in the quality of riparian wildlife habitat and fisheries habitat found in the other Owyhee Canyonlands WSAs. Therefore, few people would be encouraged to hike in this canyon in search of scenic, wildlife or botanical values.

The numerous talus slopes found within the Owyhee Canyonlands complex reach to the surrounding plateau and encourage the exchange of recreation use between the rivers and plateau in all WSAs except the Little Owyhee River WSA. Access to the plateau in this WSA is restricted by a 50 foot or more vertical wall of rimrock extending along much of the length of the canyon. In the other WSAs, a hike to the plateau for scenic views is a common pastime at boating camps.

To date, backpacking use of the WSAs has been limited and has generally confined to or near canyon areas. Because traveling across the sagebrush plateau tends to generally result in a sense of monotony, recreational use of the plateau areas should tend to remain concentrated near the canyon rims. These rimrock areas of the plateau often offer less arduous hiking conditions than those in the canyons and provide numerous opportunities for spectacular vistas of the canyons below. The area of use on the plateau is likely to be fairly wide in many of the WSAs in Idaho due to the very meandering character of the canyon rimrock and the presence of major side drainages. These natural features encourage travel at greater distances from the rimrock because of easier, more straight forward hiking conditions. Furthermore, since the canyon system can be seen at greater distances on many plateau areas due to downsloping terrain, visitors can enjoy vistas at greater distances. Hiking on the plateau also provides an opportunity to experience vast, open spaces stretching to the distant horizon. Therefore, many of the plateau areas within close proximity of the canyons have outstanding primitive experiences equivalent to those of the canyons. The WSAs with notable outstanding primitive recreation opportunities on the plateau are Idaho WSAs ID-16-48B, 16-49A, 16-49D, 16-52 and the northern portion of 16-53.

Because of the miles of canyons available and the large size of the plateau, quality primitive recreation experiences can last several days to a week or more in each WSA and up to several weeks in the WSA complex.

Though the Little Owyhee River WSA possesses less than outstanding primitive recreation values, it has a high degree of naturalness and has outstanding opportunities for solitude.

VEGETATION

The upper Owyhee River system lies within a broad regional landform and vegetation classification known as the Intermountain Sagebrush Province/Sagebrush Steppe Ecosystem (ecosystem 3130-49, Bailey, R. G., Kuchler, A. W., 1966, Potential Natural Vegetation of the United States, USDI, Geological Survey).

The Intermountain Sagebrush Province/Sagebrush Steppe ecosystem is widespread over much of southern Idaho, eastern Oregon and Washington, and portions of northern Nevada, California, and Utah. This ecosystem contains a large diversity in landform and vegetation types ranging from vast expanses of flat sagebrush covered plateaus to rugged mountains blanketed with juniper woodlands and grasslands. The present NWPS representation of the ecosystem is confined to upland slopes and drainages in fringe or transitional zones between sagebrush-grassland communities and coniferous forests. The WSAs of the Owyhee Canyonlands are geographically centered within this ecosystem and have a landform and vegetation more typical of the ecosystem. The WSAs can be more accurately described as a part of a rhyolite upland-canyonlands/ sagebrush-bunchgrass ecosystem.

The canyons of each of the Owyhee Canyonlands WSAs are comprised of about 70% rhyolitic and basaltic rock outcrop, 10% rock rubble (talus), 15% river bottomlands and 5% riparian areas. The most dominant plant species on the landscape is big sagebrush. Basin big sagebrush (Artemisia tridentata tridentata) is commonly found on the canyon bottoms while Wyoming big sagebrush (Artemisia tridentata wyomingensis) occupies the dryer slopes of the canyons. Pure stands of Idaho fescue (Festuca idahoensis) and bluebunch wheatgrass (Agropyron spicatum) often occupy the steep slopes, with Idaho fescue being more abundant in sheltered, moister habitats. In WSA OR-3-195(ID-16-48B) there are widely scattered junipers on the slopes of the canyons. In the moister, more sheltered areas of most WSAs, there are small stands of western juniper (Juniperus occidentalis). Juniper trees are most abundant in the Owyhee River Canyon below Three Forks, Oregon. Hackberry (Celtis douglasii) is also found scattered along the canyon bottoms. The vegetation in the canyons is mostly in good ecological condition with some areas being in excellent or pristine condition. Some areas of fair condition exist in the South Fork Owyhee River Canyon of WSA ID-16-48B and in the East Fork Owyhee River Canyon of WSA ID-16-49A.

A list of predominant plant species found in the Owyhee Canyonlands WSAs is shown on the following page.

Plant Species List for the Owyhee Canyonlands WSAs
(Predominant Species)

TREES:	
western juniper	(Juniperus occidentalis)
quaking aspen	(Populus tremuloides)
willow	(Salix species)
hackberry	(Celtis douglasii)
cottonwood	(Populus spp.)
SHRUBS:	
Sagebrush:	
low sagebrush	(Artemisia arbuscula)
big sagebrush	(Artemisia tridentata)
basin big sagebrush	(Artemisia tridentata tridentata)
mountain big sagebrush	(Artemisia tridentata vaseyana)
Wyoming big sagebrush	(Artemisia tridentata wyomingensis)
silver sagebrush	(Artemisia cana)
Other:	
antelope bitterbrush	(Purshia tridentata)
Woods rose	(Rosa woodsii)
willow	(Salix species)
GRASSES OR GRASSLIKE PLANTS:	
Grasses:	
Idaho fescue	(Festuca idahoensis)
bluebunch wheatgrass	(Agropyron spicatum)
Sandberg bluegrass	(Poa sandbergii)
big bluegrass	(Poa ampla)
bottlebrush squirreltail	(Sitanion hystrix)
cheatgrass	(Bromus tectorum)
Grasslike Plants:	
rush	(Juncus species)
sedge	(Carex species)
FORBS:	
longleaf phlox	(Phlox longifolia)
Hoods phlox	(Phlox hoodii)
locoweed	(Astragalus species)
American rockbrake	(Aerostechoices species)
Hooker balsamroot	(Balsammorhiza hookeri)
arrowleaf balsamroot	(Balsammorhiza sagittata)
wild buckwheat	(Erigonum species)
biscuitroot, desert-parsley	(Lomatium species)
lupine	(Lupine species)
Rocky Mountain iris	(Iris missouriensis)
yarrow	(Achillea millefolium)
littlehead clover	(Trifolium microcephalum)
five finger	(Potentilla species)

The riparian areas of the canyons are comprised mostly of grasses, rushes (Juncus spp.) and sedges (Carex spp.). Only in sheltered areas of the main canyons and tributary canyons are species of willow (Salix spp.), quaking aspen (Populus tremuloides) and cottonwood (Populus spp.) found. High water flows in winter and early spring scour the canyon bottoms and prevent growth of larger shrubs and tree species.

On the plateau there is a vegetation mosaic of low sagebrush species, big sagebrush (mostly Wyoming big sagebrush), bunchgrasses and antelope bitterbrush (Purshia tridentata). Scattered western juniper are also spread over much of the northern plateau of Idaho within WSA ID-16-48B. Big sagebrush stands occupy deeper soil sites on generally more than 50% of the land surface of the WSAs. Low sagebrush stands occupy the shallower soil sites on about 35% of the land surface with less than 15% of the plateau areas being barren. The vegetation of the plateau area within the WSAs is generally in good ecological condition close to the canyon rims, but in poor to fair condition over the remainder of the areas.

Under natural conditions, the vegetation of the sagebrush-bunchgrass ecosystem within the WSAs would evolve to a plant community composed of perennial grass and forb species with a sagebrush overstory. The degree to which sagebrush dominance occurs depends upon soil types, the influence of topography and climate, and the frequency of wildfires. The sagebrush component would generally tend to increase within the plant community until wildfires (or some other disturbance such as insect activity) remove or reduce the sagebrush overstory. Following fire, the grasses and forbs are the first to reestablish in the burned-over areas, but the successional changes toward sagebrush dominance soon begin. The natural fire regimes have reated a vegetation mosaic of open grassland and sagebrush stands of various ages. The mosaic has evolved from the fire susceptibility of different ecological sites (soil/vegetation sites) and the presence of topography barriers.

Since the advent of livestock grazing, the removal of much of the fine fuels (grasses) during the fire season has greatly reduced the incidence of wildfire. Consequently, much of the land within the WSAs has gradually progressed toward a native plant cover dominated by sagebrush. However, in recent years (1984 and 1986), several large wildfires have occurred on the plateau lands within and around the WSAs which restored grass species to dominance in native plant communities on affected lands. Besides reducing the potential for wildfire, livestock grazing often reduces the vigor of perennial grasses, providing a competitive edge to sagebrush. Areas which have been intensely grazed have had a more rapid development of sagebrush dominance than those areas lightly grazed. This difference is reflected in the fact that areas less accessible to livestock grazing, such as the canyons and the plateau areas with significant surface rock rubble or without water sources (stock ponds), are rated in good or excellent (pristine) ecological condition but the more accessible areas on much of the plateau are rated as fair or poor. The areas of the plateau most severely affected are the big sagebrush ecological sites. These sites, covering relatively large areas of the WSAs' plateau, have deep loamy soils favorable to a vegetation cover

dominated by a dense overstory of big sagebrush. The least affected plateau areas are the low sagebrush ecological sites where shallow, rocky soils inhibit the formation of dense sagebrush overstories.

There are 237,895 acres (primarily big sagebrush ecological sites) that are suitable for vegetative treatment (prescribed burning) to reduce sagebrush overstories. A portion of these sites would be treated under the Proposed Action and alternatives. A breakdown of the suitable acres by WSA is shown in Table III-2 on the following page.

There are ten known plant species located in the Owyhee Canyonlands which are classified on state lists by the scientific community as threatened or sensitive (as of January 1, 1987). These plants are listed below. Two are classified on the federal list (U.S. Fish and Wildlife Service) as Category II.

1) Owyhee River Stickseed (Hackelia ophiobia) - On the Oregon Natural Heritage Plan List of threatened species.

2) Packard's Sagebrush (Artemisia packardiae) - On Idaho's Sensitive List.

3) White Eatonella (Eatonella nivia) - On Idaho's Sensitive List.

4) Anderson's Buttercup (Ranunculus andersonii) - On the Oregon Natural Heritage Plan List of threatened species and on Idaho's Sensitive List.

5) Hedgehog cactus (Pediocactus simpsonii var. robustio) - On Idaho's Sensitive List.

6) Rigid Thread-stem (Nemacladus rigidus) - On Idaho's Sensitive List.

7) Inch-High Lupine (Lupinus uncialis) - On Idaho's Sensitive List.

8) Bailey's Ivesia (Ivesia baileyi) - On Idaho's Sensitive List.

9) Barren Milkvetch (Astragalus sterilis) - On the federal list of threatened and endangered species (Category II).

10) Morning Milkvetch (Astragalus atratus var. inseptus) - On the federal list of threatened and endangered species (Category II); (Astragalus atratus var. owyheensis) - On Idaho's Sensitive List.

Though some endangered, threatened or sensitive plant species are known to exist on the Owyhee Upland's plateau at lower elevations in eastern Oregon or in plias on higher elevation plateau areas of Oregon, Idaho or Nevada, none of these species has been inventoried within the Owyhee Canyonlands WSAs.

TABLE III-2

AMOUNT OF LAND SUITABLE FOR VEGETATION TREATMENT
WITHIN THE OWYHEE CANYONLANDS WSAs

State	WSA	Allotment	Suitable Acres
OREGON	OR-3-195	1001 1005 1101 1102 1307 1401 1402	3,600 0 20,800 4,300 27,200 37,800 48,700
		TOTAL	142,400
IDAHO	ID-16-48B	0540 0584 0593 0629	1,575 4,500 225 2,700
		TOTAL	9,000
	ID-16-48C	0629	14,100
	ID-16-49A	0540 0551 0584 0593 0634 0803	435 1,100 5,300 270 1,435 7,165
		TOTAL	15,705
	ID-16-49D	0584 0805	700 1,740
		TOTAL	2,440
	ID-111-49E	0803 0805 0808	6,740 1,915 175
		TOTAL	8,830
	ID-16-52	0584 0805	1,700 2,350
		TOTAL	4,050
	ID-16-53	0584 0629	13,800 9,900
		TOTAL	23,700
NEVADA	NV-010-103A	1024 103	1,230 3,200
		TOTAL	4,430
	NV-010-106	1019 1024 1037	1,570 8,110 3,560
		TOTAL	13,240
TOTAL	-------	----	237,895

WILDLIFE

The Owyhee River WSAs provide excellent habitat for many species of wildlife. The primary species are California bighorn sheep, mule deer, pronghorn antelope, river otter, beaver, mountain lion, bobcat, Canada geese and other waterfowl, sage grouse, chukars and raptors. Wildlife diversity associated with the rhyolite canyonlands/sagebrush-bunchgrass ecosystem is a result of many vegetative types that exist in unique habitat features created by the joining of the sagebrush-bunchgrass plateau and deeply cut canyons. Some species are dependent upon this ecosystem for year-round habitat and other species can be found seasonally. For the most part, wildlife habitats are in good condition on the steep slopes and canyon bottoms and in fair to poor condition on the plateau. Wildlife species addressed in this EIS are discussed below. Other wildlife found in the WSAs is listed in Appendix A.

The rhyolite upland-canyonlands/sagebrush-bunchgrass ecosystem provides yearlong habitat for bighorn sheep (on the sensitive species lists for Idaho, Nevada and Oregon as of January 1, 1987). Bighorn sheep are dependent upon a natural undisturbed environment for their survival. The Owyhee River system presently provides for this environment. California bighorn sheep (Ovis canadensis californiana) were successfully reestablished in the Battle Creek, Deep Creek and Owyhee River canyon complex (WSAs ID-16-49A, 16-49D and 111-49E) during the sixties. Since that time, their population has expanded westward along the Owyhee River into WSA ID-16-48B. In 1985, bighorn sheep were reintroduced into the canyon complex of the South Fork Owyhee River in WSA ID-16-53 (NV-010-103A). Presently an estimated population of 400 bighorns inhabits the Owyhee Canyonlands year around. The Oregon Department of Fish and Wildlife is also attempting to reestablish bighorn sheep into the Owyhee River Canyon of Oregon in WSA OR-3-195. In time, it is expected that bighorn sheep will inhabit portions of all Owyhee Canyonlands WSAs in Oregon, Idaho and Nevada.

Mule deer occupy the sagebrush plateaus throughout most of the year but during heavy snow will migrate to the canyons which provide thermal cover and food from exposed sagebrush plants. The canyons as well as the sagebrush plateaus provide escape, breeding and resting cover. Mule deer are the most numerous big game species in the WSA. Within the WSA complex, year-long populations are estimated to average about three animals per square mile with slightly higher densities normally occurring near the canyons and riparian areas with accessible water sources. During the winter, densities are estimated to average up to about 10 animals per square mile in small canyon areas where deer concentrate.

Pronghorn prefer to occupy lands that are wide open and expansive with low rolling terrain. They prefer vegetation areas with a height no higher than 24 inches and preferably a mean of 15 inches (BLM Tech Note 347). Pronghorn are scattered throughout the WSAs and are primarily limited to the plateua above the canyons. Important spring-summer-fall ranges for pronghorn can be found in WSAs ID-16-49A, ID-16-49D and ID-111-49E. WSAs OR-3-195(ID-16-48B), ID-16-48C, ID-16-53 and a portion of ID-16-49A are considered yearlong range. Large wintering concentrations occur in WSAs ID-16-49A and ID-111-49E. It is estimated that there are approximately 200 antelope in the WSA complex.

Sage grouse depend on sagebrush for their survival. During the winter, sagebrush provides nearly all of their diet and is also important escape cover. Important wintering areas are found along the canyon areas where sagebrush tends to be exposed during the winter periods. Sagebrush is also important as nesting, shade and roosting cover. Relatively open sage cover is the preferred habitat for strutting grounds. Sage grouse are found scattered over the plateau and are one of the most numerous upland game birds in the area. Large concentrations of these birds are found close to the rim during the winter. Sage grouse populations are estimated to generally be above average throughout most of the WSA complex and recent trends indicate that populations are increasing. The sage grouse is now a candidate species for federal listing as Threatened or Endangered in Oregon.

Redband trout thrive best in water systems that contain clear gravels for spawning, pool/riffle ratios of approximately 50/50, water temperatures in the 68° - 70° range and well oxygenated water. The redband trout is a state listed sensitive species in all three states. Most redband trout are found at the mouths of tributaries into the Owyhee River such as Red Canyon Creek and Battle Creek. They are also found in the West Little Owyhee River at low to average population levels.

There is an estimated 500 nesting pairs of Canada geese and other waterfowl within the Owyhee River system. The current level of river use, particularly float boating, is adversely affecting waterfowl populations by disturbing nesting adults and by seperating juveniles from their parents. Recreational river use is projected to increase over the next 20 years regardless of wilderness designation or nondesignation. The projected increase in river use is expected to further reduce water- fowl populations. Since the projected increase in river use, and resulting impacts on waterfowl populations, would be the same under all alternatives and not dependent on wilderness designation or non- designation, waterfowl are not included in the impact analysis and are not discussed further.

Numerous raptor species including golden eagles, red-tailed hawks, prairie falcons and great horned owls are known to inhabit the Owyhee River system. Impacts to raptor species would primarily be attributed to recreation use which would be substantially the same under all alternatives and independent of wilderness designation or nondesignation. Overall impacts on raptor species would be minor and would be substantially the same under all alternatives, therefore, they will not be discussed further.

The endangered bald eagle (threatened in Oregon) and the endangered peregrine falcon have been observed in the Owyhee Canyonlands area. Sensitive species in the area include river otter, tundra swan, ferruginous hawk and Swainson's hawk. Management actions have been developed to protect these species where they occur. Impacts on these species would be minor, substantially the same under all alternatives, and independent of wilderness designation or nondesignation. Consequently, they will not be discussed further.

CULTURAL VALUES

The Owyhee River canyons and surrounding plateau are rich in historic homesteads and prehistoric sites. Most of the historic resources lie along the Owyhee River and South Fork Owyhee River on private property between or immediately adjacent to the WSAs. The major historic sites are located near the Owyhee River's confluences with Louse Canyon (West Little Owyhee River), Battle Creek Canyon, Oxbow Canyon, and the East Little Owyhee River (45 Ranch), and at Twelve Mile, Coyote Hole and Crutcher's Crossing. These sites typically consist of one or more stone buildings with partially collapsed sod roofs supported by juniper logs, or of log cabins constructed of well weathered junipers carved with names and dates of yearly visitors and settlers. Other features include waterwheels, old wagons, wooden water pipes, juniper- brush corrals, old wood stoves, and numerous miscellaneous metal pieces.

Some historic ruins are also located on public lands within the WSAs. The ruins consist mostly of small stone buildings. These ruins are located in WSAs OR-3-195(ID-16-48B), ID-16-49A, ID-16-49D, ID-16-53(NV-010-103A) and NV-010-106.

Within the WSAs evidence of prehistoric use includes stone tools and the chips produced in tool making. Many petroglyphs are also found in the Owyhee River Canyon below Three Forks in WSA OR-3-195.

Cultural resource inventories completed by BLM have located numerous sites along the rims of the canyons and on the surrounding plateau. Prehistoric sites have also been found within some caves or beneath rock overhangs in the canyons above the rivers' high water lines. Dirty Shame Rockshelter, located in WSA OR-3-195 was excavated in 1973 (Aikens et al. 1977). Radiocarbon dates showed that the site was intermittently occupied between 9500 and 400 years ago. Periodic high water levels which erode the river terraces may have erased much of the evidence of prehistoric activity along the canyon bottoms.

RECREATION USE

The WSAs of the Owyhee River system offer outstanding primitive and semi-primitive motorized recreation opportunities in a scenic, natural setting. The recreation activities available include river running, hunting and fishing, backpacking, off-road vehicles (ORV) activities, vehicle camping, rock hounding, horseback riding, photography and nature study.

Whitewater river running is the major primitive recreation activity enjoyed by the public. The Owyhee River system has become nationally recognized as an early-season whitewater river. Although backpacking opportunities are outstanding, backpacking has not yet become a significant use of the Owyhee Canyonlands. Currently, backpacking use is at about 40 user days per year or less in those WSAs with major tributary canyons to the Owyhee River including Louse Canyon in WSA OR-3-195; Deep Creek Canyon in WSA ID-16-49A; Oxbow Canyon of WSA ID-16-49D; Juniper Canyon of WSA ID-16-52.

No known backpacking use has occurred in Battle Creek Canyon of WSA ID-111-49E or the East Little Owyhee Canyon of WSA ID-16-48C. In recent years the use of llamas for hiking into the Owyhee Canyonlands has occurred.

The Owyhee Wild and Scenic River Study completed in 1979 recommended to Congress that a 192-mile segment of the Owyhee River and East Fork Owyhee River (124 miles within the WSAs) extending from the western boundary of the Duck Valley Indian Reservation in Nevada to the Owyhee Reservoir in Oregon be added to the National Wild and Scenic Rivers System. In 1984, Congress designated only the Oregon portion of the Owyhee River as a wild river. The South Fork of the Owyhee River was not included in the 1979 study, however, the South Fork is included within the Nationwide Rivers Inventory for further study.

The Owyhee River, East Fork Owyhee River and the South Fork Owyhee River can be floated during the high water period from February through June. Most boating use occurs from mid-April to mid-June, with highest use during the Memorial Day weekend. Boating use on the entire river system increased from about 500 people in 1974 to over 2,000 people by 1980. In 1982, boating use on the portion of the rivers within the WSAs was about 90 trips with a total of 600 participants, with one-third of the trips originating above Three Forks. Seventeen percent of these trips were run by commercial operators. About 1,000 days of boating use occurred above Three Forks in 1982, while 1,130 days occurred from Three Forks to Rome.

The Owyhee River Management Plan completed by the BLM in 1983 established the following carrying capacities for boating use within the WSAs' river canyons (69,200 acres) during a 91-day control period (April 1 - June 30). The carrying capacity was reaffirmed in the Owyhee National Wild River Management Plan (1985).

TABLE III-3

OWYHEE RIVER INTERIM CARRYING CAPACITIES WITHIN WSAs

	Starts/day (parties)	Max. Party Size	Parties/ Year	People/ Year	User Days
Above Three Forks	2	15	182	2,730	13,650
Three Forks to Rome	4	15	364	5,460	16,380
TOTAL	6	--	546	8,190	30,030

Under the river plan, 91 river trips with 4,095 user days per year can occur within WSAs ID-16-49A and 16-48D between the Garat Crossing (El Paso Gas Pipeline Crossing) and the confluence of the East Fork Owyhee River and the South Fork Owyhee River in WSA ID-16-48B. Likewise, 91 starts with 4,095 user days can occur within WSAs ID-16-48B, ID-16-53 (NV-010-103A) and NV-010-106 between the "YP" Ranch (southern tip of WSA NV-010-106) and the confluence of the rivers. An additional 5,460 user days spread over the 182 starts can occur in WSA OR-3-195(ID-16-48B) between the rivers' confluence

and Three Forks, Oregon. Below Three Forks, another 364 trips with 16,380 user days per year can occur (see Table III-6). Due to weather and water flow constraints, it can be expected that an average year would only allow about one-half of the potential starts during a 45 consecutive day "useable float period."

No carrying capacity has been established for the Owyhee River in WSA ID-16-52 above the Garat Crossing because levels of use are extremely limited due to the difficult whitewater present.

TABLE III-4

RIVER TRIP STARTS AND USER DAYS OCCURRING IN THE OWYHEE CANYONLANDS UNDER THE CARRYING CAPACITY

Affected WSAs	Length of Time in WSAs (days)		Number of Trips/Year		Number of User Days/Year	
	E Fork Owyhee	S. Fork Owyhee	E Fork Owyhee	S. Fork Owyhee	E Fork Owyhee	S. Fork Owyhee
ID-16-49A, ID-16-49D	3		91		4,095	
OR-3-195(ID-16-48B) Above Confluence ID-16-53(NV-010-103A) ID-16-106		3		91		4,095
OR-3-195(ID-16-48B) Above Three Forks	Main Owyhee		Main Owyhee		Main Owyhee	
	2		182		5,460	
OR-3-195(ID-16-48B) Below Three Forks	3		364		16,380	
TOTAL	8		546		30,030	

The total annual carrying capacity of the river system should not be reached by the year 2002. However, daily carrying capacities have already been surpassed in the section from Three Forks to Rome on some days, especially on weekends during the latter part of the boating season.

The carrying capacity of 30,030 user days per year within the WSA complex is about 15 times greater than current use levels. The carrying capacity estimate is based upon limiting recreation visitor groups starts (launches) on the river system to an average of one per day on the East Fork Owyhee River and South Fork Owyhee River of Idaho and Nevada, and four per day at Three Forks on the main stem Owyhee River in Oregon.

It is projected that actual river recreation use would only reach 11,000 user days per annum within 20 years. A total visitation to the Owyhee River system of 11,000 user days in 20 years would occur from about 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks. Of the 92 days within the carrying capacity monitoring period (April 1 through June 30 of each year), only about 45 consecutive days in any given average water year would receive boating use because of a combination of weather conditions and appropriate river flow levels. Based upon these figures, the East Fork can expect to have one trip starting about once every two days whereas the South Fork can expect one or two trips starting every day. The main stem Owyhee River at Three Forks can expect four trip starts per day.

Hunting and some fishing, and their associated ORV activities and vehicle camping, are the principal semi-primitive motorized recreation activity enjoyed by the public. Some ORV use and vehicle camping also occurs for sightseeing purposes. Semi-primitive motorized recreation opportunities exist on 13 miles of boundary roads separating the WSAs and on 38.4 miles of interior (cherrystem) roads. There are also 114.3 miles of two-wheel tracks or ways within the WSAs which provide additional semi-primitive motorized recreation opportunities (see Table III-5). In recent years, two-track hunting routes (ways) have been developing along the rimrock areas of the South Fork Owyhee River Canyon in WSA ID-16-53(NV-010-103A). Some hunters enjoy their hunting experience in a more primitive setting by traveling predominantly on foot or horseback. There are no developed recreational trails. Travelers on foot or horseback must follow big game or livestock trails, primitive roads, or journey crosscountry. The lack of developed trails serves to disperse users and to provide greater challenges to recreationists.

The hunting seasons vary among the three states. Seasons generally run from September through February depending upon wildlife species. The principal big game species hunted are mule deer and antelope. Mountain lion and bighorn sheep are also hunted in limited numbers. Total 1982 hunting use within the WSAs for the three states is estimated at 1,700 user days. It is felt that hunting use is spread evenly throughout all WSAs according to their relative size.

Another semi-primitive motorized activity occurring regularly in the WSAs is rock hounding. The Owyhee River canyon system has an abundant resource of gem stones. Use occurs by individuals and within organized outings by local rock and mining clubs. Rock hounding use is currently estimated at 200 user days or less per year throughout the entire WSA complex. Rock hounding use is associated primarily with the canyon areas.

Neither backpacking, hunting, rock hounding, sightseeing or ORV use is occurring at a level which warrants the establishment of a regulated carrying capacity.

Whitewater boaters, backpackers, hunters, ORV enthusiasts and rock hounds are all in need of adequate access to the canyons of the Owyhee River to enjoy their recreation activities. Among the miles of roads and two-wheel tracks previously discussed are eight access roads into the canyons. These access roads are found at the following locations:

Owyhee River

1. Duck Valley Indian Reservation, Idaho
2. El Paso Gas Pipeline (Garat Crossing), Idaho
3. Battle Creek, Idaho
4. Crutcher's Crossing, Idaho
5. Three Forks, Oregon

South Fork

1. YP Ranch, Nevada
2. El Paso Gas Pipeline, Nevada
3. 45 Ranch, Idaho

TABLE III-5

VEHICLE ROUTES WITHIN THE OWYHEE CANYONLANDS WSAs

WSA	Miles	
	Roads	2-Wheel Tracks (Ways)
OR-3-195 (ID-16-48B	20.3	82.5
ID-16-48C	0	0
ID-16-49A	8.5	11.5
ID-16-49D	1.3	1.0
ID-111-49E	1.3	1.0
ID-16-52	.5	0
ID-16-53 (NV-010-103A)	6.5	14.3
NV-010-106	0	4.0
TOTAL	38.4	114.3

LIVESTOCK GRAZING

Grazing Allotments

Public lands within the WSAs play an important role in providing livestock forage. Collectively, the WSAs affect 24 allotments and 56 range users. There are 10 allotments and 35 range users affected by WSA lands in Oregon. The WSA lands in Idaho affect 11 allotments and 19 range users. In Nevada, three allotments and two range users are affected. Allotment size, active preference (Animal Unit Months-AUMs) and related information is given on Table III-7. The affected allotments are currently undergoing adjustments in active preference to balance livestock use with forage production.

Livestock operators use existing roads and ways to check live- stock, distribute salt and to inspect or maintain range developments.

Range Developments

On an allotment basis, grazing systems have been designed to foster proper livestock use and correspondingly improve range condi- tion. Implementation of these systems and improvement of the range is dependent upon existing and in some cases proposed structural rangeland improvements and vegetation manipulation projects. There are currently 82 reservoirs, 4 developed springs and 59 miles of fence throughout the WSAs (see Table III-6). An estimate of addi- tional projects that would be implemented within each WSA under the Proposed Action and various alternatives is discussed in Chapter II.

TABLE III-6

RANGELAND DEVELOPMENTS WITHIN AND ADJACENT TO THE OWYHEE CANYONLANDS WSAs[1]

WSAs	Reser-voirs	Developed Springs	Fence (miles)[2]	Corrals	Pipe-lines[3]
OR-3-195	60	1 windmill	46.1	1	14.0
(ID-16-48B)	4	4	6.0	--	--
ID-16-48C	2	--	2.5	--	--
ID-16-49A	28	--	4.0	2	--
ID-16-49D	3	--	0.3	--	--
ID-111-49E	1	--	0.3	1 (historic)	--
ID-16-52	--	--	0.5	1 (metal bldg)	--
ID-16-53	6	3 windmills	2.3	--	--
(NV-010-103A)	--	--	--	--	--
ID-010-106	1	--	--	--	--
TOTAL	105	10	86.6	5	14.0

[1] Adjacent developments refers to those lying along WSA boundary roads and/or at the legal edge of the WSAs.
[2] Does not include gap fencing.
[3] With stock watering tanks.

Table III-7
AFFECTED GRAZING ALLOTMENTS

Affected Allotments	Total Allotment Size (Acres)	Allotment Active Preference (AUMs)	Allotment Acreages Within WSAs		% Allotment Within WSAs	% of WSA Acreage Within Allotment
OREGON						
Arock 1001	65,811	9,519	OR-3-195	8,080	12	4
Willow Creek 1004	68,446	10,618	OR-3-195	3,335	5	1
Raburn 1005	5,856	1,040	OR-3-195	1,080	18	≤1
Whitehorse 1008	28,451	4,478	OR-3-195	2,405	8	1
Jackies Butte 1101	211,648	14,334	OR-3-195	32,475	15	14
Ambrose Maher 1102	4,002	580	OR-3-195	4,002	100	2
Campbell 1306	155,947	14,518	OR-3-195	14,285	9	6
Louse Canyon Community 1307	127,642	11,579	OR-3-195	24,920	20	11
Anderson 1401	41,420	2,964	OR-3-195	41,420	100	18
Star Valley Community 1402	183,180	6,852	OR-3-195	58,050	32	26
NEVADA						
Petan-Owyhee 1019	10,324	2,094	NV-010-106	2,600	25	12
Owyhee 1024	369,653	30,225	NV-010-103A	2,064	≤1	4
			NV-010-106	13,398	4	61
			Total	15,462	5	
YP 1037	96,795	13,023	NV-010-103A	5,388	6	11
			NV-010-106	5,872	6	27
			Total	11,365	12	
IDAHO						
Garat Individual 0524	963	80	ID-16-48B	130	13	≤1
Bull Basin 0540	44,403	3,726	ID-16-48B	12,045	27	5
			ID-16-49A	3,265	7	4
			Total	15,310	34	
Garat 0584	207,219	33,305	ID-16-48B	7,920	4	4
			ID-16-49A	21,750	10	31
			ID-16-49D	4,745	2	47
			ID-16-52	5,855	3	45
			ID-16-53	21,825	11	43
			Total	62,095	30	
Crutcher Crossing 0593	3,665	138	ID-16-48B	1,850	50	≤1
			ID-16-49A	1,815	50	3
			Total	3,665	100	
"45" 0629	62,410	2,152	ID-16-48B	11,755	19	5
			ID-16-48C	6,260	10	25
			ID-16-53	21,075	34	42
			Total	39,090	63	
Castlehead-Lambert 0634	45,623	3,123	ID-16-49A	10,300	23	15
Tent Creek 0661	61,010	1,700	Id-16-48C	18,340	30	75
Big Springs 0803	192,552	17,851	ID-16-49A	21,760	11	31
			ID-111-49E	17,200	9	55
				38,960	20	
Riddle 0805	189,800	27,199	ID-16-49D	5,245	3	53
			ID-111-49E	13,890	7	44
			ID-16-52	7,295	4	55
			Total	26,430	14	
Northwest 0808	231,467	13,400	ID-111-49E	450	≤1	1
Nickel Creek 0657	68,912	4,891	ID-16-49A	11,270	16	16

WATER QUALITY

The water quality of the Owyhee River system is affected by sedimentation and pollution from both human and animals sources. Clark (1978) states that agricultural runoff, septic tank and privy drainage, and solid waste are believed to contribute to cultural nonpoint source pollution from the Duck Valley Indian Reservation east of the WSA complex. Pollution input from the Reservation appears to recover rapidly to a good condition as the East Fork Owyhee River progresses downstream and is increased in volume from Battle Creek and Deep Creek. These creeks, however, along with the South Fork of the Owyhee River and East Little Owyhee River, are major downstream sources of pollutants, contributing large amounts of sedimentation to the Owyhee River system from lands upstream of the WSAs. The level of water pollution in the South Fork Owyhee River, like that of the East Fork Owyhee River, is affected principally by agricultural runoff from private, intensely managed pasture lands and from BLM lands which line its upper reaches south of the WSA complex. Within the WSAs, livestock grazing is considered to be the greatest input for nonpoint source pollution.

SOILS

The soils of all the Owyhee Canyonlands WSAs occur on two main physiographic positions. They are the nearly level to gently rolling plateau with the associated sideslopes and the canyons and stream channels.

Soils of the plateau were formed in alluvium derived dominantly from basalt and rhyolite. They are shallow or moderately deep. These soils are well developed and have loamy or clayey profiles free of rock fragments on the less sloping areas but more skeletal on the sideslope positions. The erosion potential is moderate to high in these areas. In areas that have surfaces modified by rock fragments, the erosion potential is moderate to low. Soils on slopes of greater than eight percent have high or very high erosion potential.

The canyons are composed of vertical rhyolite and basalt walls and columns that are irregularly fractured to various degrees. Soils occur on colluvial-alluvial sideslopes and breaks. They are shallow or moderately deep. They are loamy in texture with greater than 35 percent rock fragments modifying the texture. The erosion potential is moderate to high.

Soils in the stream channels formed in recent alluvium. Depths are shallow to deep. The profiles show very weak to weak development and are variable in texture and rock fragment content. The erosion potential is high or very high. Stream banks are highly unstable, particularly along the South Fork Owyhee River where riparian vegetation is less abundant.

The Owyhee Canyonlands WSAs average approximately two tons/acre/year of soil loss (Modified Universal Soil Loss Equation (MUSLE) method). This is within the tolerance limits acceptable for rangelands. These limits are between one and five tons/acre/year depending on soil characteristics and environmental conditions.

Erosion rates as calculated by the MUSLE are a function of many factors, most importantly soil erodability (K factor), slope length and steepness, amount of cover, and rainfall intensity. It is important to note that the above figures are estimates and do not indicate absolute values. No actual measurements have been made and the calculations have been applied over a broad and diverse landscape. It is also important to note that the MUSLE calculates long-term average rainstorm-caused erosion and will not necessarily reflect erosion caused by snowmelt runoff. Spring runoff may contribute significantly to the amount of soil erosion, especially at higher elevations in the WSAs. The MUSLE is used to measure soil loss from both sheet and rill erosion and does not take into account gully erosion.

The major factor affecting the broad based degree of soil loss is the amount of poor and fair condition rangeland. Areas that have a poor ecological vegetative condition have proven less effective in protecting the soil resource. Both plant composition and density are important in their effect on water infiltration rates. Plant density provides a protective vegetative and litter cover for the soil surface. This cover intercepts rain drops and dissipates impact velocity. Areas dominated by grasses tend to protect the soil more than those dominated by shrubby species. Pearse and Wooley (1936) found that fibrous rooted species (grasses) had greater infiltration rates than tap rooted species (shrubs and forbs).

When infiltration rates are decreased the result is an increase in runoff and subsequent soil loss. Eventually, this detached soil material enters streams, rivers and other bodies of water, thereby degrading these systems and contributing, along with other factors, to reduced water quality.

Also affecting infiltration is the amount of compaction and the resulting increase in bulk density of the soil surface. Trampling by livestock, mining activities, and road building are direct causes of compaction. Under moist soil conditions (spring and early summer) even light trampling can effectively compact the soils. Soil compaction can also reduce vegetative productivity and vigor.

Roads can be a major source of erosion. Erosion from unsurfaced roads can be as much as 20 times that of an undisturbed area. Improper design, poor maintenance, soil compaction, road use, weather, and runoff can result at times in severe erosion problems. Sediment transported from these areas can impact the quality of streams and the associated aquatic communities. It is estimated that six to eight tons/year/mile of soil would be lost from the existing roads and ways.

ASSOCIATED LANDS (Non-WSA Lands)

Lands within the WSAs are 97% to 100% federally owned and administered by the BLM Vale, Boise and Elko District Offices. Land ownership by WSA is shown in Table III-8A on the following page.

TABLE III-8A

LAND OWNERSHIP WITHIN WSAs

WSA	BLM Acres			Non-BLM Acres		Total of all Lands
	BLM Surface					
	BLM Sub-surface	Split-estate[1]	BLM Total	Idaho State	Private	
OR-3-195 (ID-16-48B)	214,020	10,38 0	224,400	1,280	120	225,800
ID-16-48C	24,600	0	24,600	640	0	25,240
ID-16-49A	70,160	0	70,160	2,560	0	72,720
ID-16-49D	9,990	0	9,990	0	40	10,030
ID-111-49E	31,540	0	31,540	1,240	40	32,820
ID-16-52	13,150	0	13,150	0	0	13,150
ID-16-53 (NV-010-103A)	50,352	0	50,352	1,280	160	51,792
NV-010-106	21,875	0	21,875	0	280	22,155
TOTAL	435,687	10,38 0	446,067	7,000	640	453,707

[1] Lands where the surface is owned by the federal government but the subsurface mineral rights are held in Oregon State ownership.

The WSAs are generally surrounded by BLM lands with isolated state lands or split-estate lands (Sections 16 and 36) and private lands. Two notable exceptions, however, are the Duck Valley Indian Reservation forming the eastern boundary of WSA ID-16-52 and a large block of state and private lands affecting the northeast boundary of WSA OR-3-195 between the Idaho-Oregon border and Three Forks, Oregon. There are also non-federal lands surrounded by some of the WSAs which are accessed by WSA boundary roads. These lands include:

1. 640 acres state; 160 acres private between WSAs ID-16-48B and ID-16-49A.
2. 560 acres state; 240 acres private between WSAs ID-16-48B, ID-16-48C and ID-16-53.
3. 360 acres private between ID-16-49A, 16-49D and 111-49E.

There is a total of 27,020 acres of private and state lands which are WSA inholdings, lands interlocked between the WSAs, or lie adjacent to the WSAs which are currently undergoing consideration (planning) for acquisition (exchange or purchase). Varying amounts of this acreage is recommended for inclusion in the wilderness proposals or Owyhee River Management Area/National Wild River proposals presented in Chapter II of this EIS (see Tables III-8A and 8B). These lands are being primarily used for livestock grazing at this time.

These lands have the greatest potential for conflicting resource uses including the development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions, cultivated pasture areas (particularly if commercial recreation development occurs), and exploration for energy/mineral resources which have an identified higher favorability for development than peripheral plateau lands of the WSAs. A wilderness or wild river designation would increase the likelihood that interlocked private lands within the river canyons would be developed for recreational purposes because of the increased notoriety of the area.

TABLE-8B

LAND OWNERSHIP ADJACENT TO THE WSAs
(CONSIDERED FOR ACQUISITION OR EXCHANGE)[1]

Affected WSA	Oregon State	Oregon Split-estate	Idaho State	Private	Total
OR-3-195 (ID-16-48B)	2,640	2,140	640	920	6,340
ID-16-48C	---	---	1,470	0	1,470
ID-16-49A	---	---	4,400	160	4,400
ID-16-49D	---	---	640	200	840
ID-111-49E	---	---	3,840	200	4,040
ID-16-52	---	---	1,280	0	1,280
ID-16-53 (NV-010-103A)	---	---	1,010	0	1,010
NV-010-106	---	---	--	0	0
TOTAL	2,640	2,140	13,280	1,480	19,380

[1] "45" Ranch and "YP" Ranch properties not under any consideration for exchange nor acquisition.

There are also 4,205 acres of non-WSA public lands adjoining the WSA boundaries which are being considered in this EIS. These lands are contiguous roadless lands which were part of the original wilderness inventory units. The non-WSA public lands (BLM) affected by the alternatives presented in this EIS are shown on Table III-8C.

TABLE III-8C

AFFECTED NON-WSA, BLM LANDS (ACRES AFFECTED AND THE PRESENCE OF MAN-MADE FEATURES) BY ASSOCIATED WSA

Associated WSA	Non-WSA Acreage Affected	Vehicle Route miles on non-WSA lands		Range Developments on non-WSA lands	
		Roads	Ways	Reservoirs (No.)	Fences (miles)
OR-3-195 (ID-16-48B)	0	-	-	-	--
ID-16-48C	1,930	0	0	1	1.0
ID-16-49A	1,620	0	0	0	0.8
ID-16-49D	0	-	-	-	--
ID-111-49E	420	0	0	0	0
ID-16-52	0	0	0	0	--
ID-16-53 (NV-010-103A)	235	0	0	0	0
NV-010-106	0	-	-	-	--
TOTAL	4,205	0	0	1	1.8

ENERGY AND MINERAL RESOURCES

Energy and mineral resources within the WSAs were initially evaluated through a Geology-Energy-Mineral (GEM) contract with TERRADATA and the Oregon Department of Geology and Mineral Industries (DOGAMI). Oregon WSA OR-3-195 was included as part of a larger study by Barringer Resources Inc. (Barringer) for WSAs in southeastern Oregon. The Bureau of Mines (BOM) and the Geological Survey (USGS) conducted joint mineral resource studies for those portions of the WSAs recommended as suitable for wilderness designation in Idaho, Oregon and Nevada.

Findings vary among the different studies due to different evaluation techniques. TERRADATA relied mainly on a literature search with only a small amount of field verification. DOGAMI employed a literature search followed by a field examination with emphasis on geochemical sampling. Barringer Resources Inc. conducted geochemical sampling of heavy mineral concentrates of stream sediment samples. The BOM and USGS conducted extensive studies involving a literature and record search, research into the mining and exploration history of the area encompassing the WSAs, geologic mapping, geochemical stream sediment samplings, petrographic and geochemical analysis of rock samples and a review of existing geophysical data.

Due to the lack of significant mineral exploration or development activity within the WSAs, a relatively minor amount of information was available through literature research. The studies by TERRADATA concluded that a generally low favorability exists for the accumulation of most mineral resources, with the exception of diatomite (Table III-9A). Geochemical studies by DOGAMI and Barringer led to the conclusion that a higher favorability exists for certain minerals within WSA OR-3-195 (Table III-9B). Those studies concluded that a moderate favorability exists for the occurrence of mercury, gold, silver, geothermal, uranium/thorium, oil and gas, bentonite, diatomite and zeolites from the same rock units studied by TERRADATA. The BOM and USGS, using a slightly different classification system, concluded that the mineral resource potential of all the WSAs was either low, nonexistent, or unknown (Table III-9C). The difference in the conclusions between the BOM/USGS studies and the DOGAMI/Barringer studies is based, in part, on the failure of the USGS to duplicate the results from some of the geochemical sampling done by DOGAMI/Barringer as well as a different interpretation of sample analyses inferred from the local and regional geology. The difference between the BOM/USGS and TERRADATA studies regarding the diatomite potential of the WSAs was based on the detailed mapping and sampling done by the BOM and USGS of known diatomite occurrence.

There are no known hardrock metallic mineral deposits within the Oregon, Idaho or Nevada WSAs discussed in this document. Zones of normal faulting in certain areas of the WSAs could provide conduits for mineral-bearing solutions. However, evidence of significant hydrothermal alteration of rocks exposed along the WSA complex is either lacking or very limited in extent. The mining industry believes the WSAs have some favorability for the occurrence of low grade, high tonnage deposits of metallic minerals. This favorability may be suggested by results obtained in the DOGAMI/Barringer Studies. Due to the presence of hot springs associated with faulting in some areas, a possibility exists that disseminated deposits of base and precious metals could exist at depth beneath the exposed volcanic rock units. Such deposits are refered to as being formed by the "hot springs" or "hot springs sinter and reef" theory. Disseminated deposits of this type are exploited by open pit mining techniques.

Based on the DOGAMI/Barringer studies, moderate mineral potential exists for gold, silver and mercury in WSA OR-3-195 which could result in the following mineral exploration activities (see also Chapter II maps):

Exploration for mercury is projected in T. 33 S., R. 44 E., Section 9; T. 37 S., R. 47 E., Sections 4, 24 and 25; and T. 35 S., R. 45 E., Sections 3 and 4. Less than one acre of surface disturbance in each of these sections is projected.

Exploration for gold is projected in T. 32 S., R. 42 E., Section 14 and in T. 36 S., R. 47 E., Section 8. Less than one acre of surface disturbance in each of these sections is projected.

Exploration for silver is projected in T. 37 S., R. 46 E., Sections 12, 13, 24 and 25; and T. 37 S., R. 47 E., Sections 5, 6, 7, 8, 18, 19, 20, 28, 29, 32 and 33. Less than one acre of surface disturbance in each of these listed sections is projected.

Based on the BOM/USGS studies, WSA OR-3-195 does not contain a sufficiently high mineral potential to justify any additional development scenarios. No mineral exploration or development is projected within the Owyhee National Wild River area in Oregon because the Wild and Scenic designation withdraws those lands from mining location and mineral leasing.

Lands in the Idaho and Nevada WSAs have generally low to nonexistent or unknown potential for metallic minerals and no exploration activities are projected in these areas.

Placer gold occurs throughout the major stream channels in all WSAs in very small amounts, averaging less than $0.03/cubic yard. Gold in this small a quantity is not considered to constitute a mineral resource.

No high temperature geothermal resources have been identified in any of the WSAs. However, due to youthful vulcanism and high regional heat flow, much of southeast Oregon and southwest Idaho are considered to be generally favorable for the occurrence of low temperature geothermal resources. The DOGAMI/Barringer studies have concluded that all of WSA OR-3-195 has a moderate potential for low temperature geothermal resources, particularly in the general vicinity of Three Forks, where springs containing 85 degree (F) water occur. The most favorable area for exploration and development is located in T.35 S., R.45 E., Sections 3 and 4, where both thermal springs and a probable geothermally heated warm water creek (Warm Springs Creek) are present. There are about 15 thermal springs clustered on private land adjacent to the WSA in Section 3 with a combined yield of about 1,000 gallons per minute. At present, low temperature technology is cost prohibitive; however, direct use for low temperature development (space heating and greenhouses) is possible provided the geothermal reservoir is large enough to support production. It is projected that less than five acres would be disturbed as a result of research and/or exploration for geothermal resources.

The petroleum industry believes that the Owyhee Uplands have a moderate to high favorability for the occurrence of hyrdocarbons. Much of the WSAs were under oil and gas leases in the early 1980's. The existence of any hyrdocarbon potential within the WSAs is a question of contention among geologists familiar with the area. The DOGAMI/Barringer studies concluded that WSA OR-3-195 has a moderate potential for the existence of oil and gas resources. This conclusion is based, in part, on the occurrence of early Tertiary sedimentary rocks exposed to the north and northeast of the WSA. On the other hand, TERRADATA, BOM and USGS studies of the WSA concluded that the oil and gas potential was either low, nonexistent or unknown. Their conclusions were based on the lack of any surficial evidence for inferring the presence of hyrdocarbons at depth and the failure of exploratory drilling on lands located to the north and south of the WSAs. Mont Warner published a paper which indicated some potential for petroleum resources in the vicinity of the Idaho WSAs. Leasing activity in the Owyhee Uplands has declined with the drop in world oil prices and little interest is likely to occur in this region until oil prices rise substantially. Should exploration drilling occur, it is projected for the purposes of analysis in this EIS to be located on plateau lands within WSAs OR-3-195, ID-16-48C, and ID-16-49A. Drilling

sites would lie outside the boundaries of the the existing Owyhee River Management Area (ORMA) because the ORMA management objectives require no surface occupancy on all leases (see maps in Chapter II).

Interbedded diatomite and zeolite deposits are well known in the Owyhee Uplands. There are large exposed deposits 50 miles to the north of the WSAs along the Idaho-Oregon border, 15 miles to the northwest of WSA OR-3-195 near Rome, Oregon, and immediately northeast of WSA ID-16-49A on Dickshooter Ridge. Based on these occurrences and the generally favorable geology of the area, DOGAMI and Barringer concluded that a moderate potential exists for diatomite and zeolites within WSA OR-3-195, and TERRADATA concluded that all the WSAs contained a high favorability for the occurrence of diatomite. Detailed mapping and sampling conducted by the BOM/USGS in their studies found some minor occurrences of these minerals in most of the WSAs. However, the actual resource potential of these minerals was rated as low due to poor quality, small size of the deposits actually found, or the depth of overburden, which made all of the deposits uneconomic and of little commercial interest. No exploration or development of zeolites or diatomite is projected to occur on lands within any of the WSAs.

The Owyhee Canyonlands contain scattered gemstone resources consisting of geodes, opal, chalcedony and jasper. Removal of gemstone materials occurs primarily as a recreational activity by local rock and mineral clubs. Two areas contain minor amounts of lapidary-quality materials. The Lu Lew prospect is located at the north end of the Little Owyhee River WSA ID-16-48C in the southwest quarter of section 25 and the southeast quarter of section 26, T.14 S. R.5 W. just outside the boundary of the WSA. The White Point prospect is located immediately east of the confluence of the Owyhee and Little Owyhee Rivers in T.13 S., R.5 W., sections 25, 30 and 36 and extends into both the Owyhee River Canyon WSA ID-16-48B and the Owyhee River-Deep Creek WSA ID-16-49A. Both areas are of primary interest to hobbyists and have little commercial value. Other gemstone occurrences are found scattered throughout most of the WSAs but are of such poor quality that no commercial interest is anticipated.

The Owyhee Canyonlands WSAs contain abundant occurrences of sand, gravel and decorative building stone. The most favorable areas for sand and gravel deposits are located within WSA OR-3-195 in T.32 S., R.42 E., sections 3,5,7 and 8. Approximately 1,200 acres of land contain about 100 million cubic yards of construction grade material. This resource has been classified as subeconomic by the USGS due to the abundance of similar deposits in the region, distance to markets, and lack of any local demand. Other sand and gravel deposits were noted in the various studies but are not considered to be resources for the same reasons noted above. Building and decorative stone occurs in the weathered rhyolitic rocks within the WSAs which could be developed if located close to markets. However, the stone resources are not considered to have any distinct or special value and cannot compete with better quality stone materials located elsewhere in the region and are not considered to have any commercial value.

TABLE III-9A

TERRADATA
CLASSIFICATION OF ALL IDAHO WSA LANDS AROUND THE OWYHEE RIVER, OWYHEE COUNTY, IDAHO FOR GEM[1] RESOURCE POTENTIAL

Commodity	Area	Classification Level	Confidence Level
Metals	Entire GRA[2]	2	B
Geothermal	Entire GRA	1	B
Uranium/Thorium	Entire GRA	1	A
Coal	Entire GRA	2	B
Oil and Gas	Entire GRA	1	B
Tar Sands/Oil Shale	Entire GRA	1	C
Limestone	Entire GRA	1	A
Bentonite	Entire GRA	2	A
Diatomite	Entire GRA	4	D
Clinoptilolite	Entire GRA	2	A
Paleontology	Entire GRA	1	A
ESLs[3]	None	1	C

1 GEM = geology, energy and mineral.
2 GRA = GEM Resource Area inventory unit.
3 ESLs = educational and scientific localities.

Classification Level:
Class 1-Lack of indications of favorability
Class 2-Low favorability
Class 3-Moderate favorability
Class 4-High favorability

Confidence Level:
Confidence Level A - Insufficient data or no direct evidence
Confidence Level B - Indirect evidence available
Confidence Level C - Direct evidence but quantitatively minimal
Confidence Level D - Abundant direct and indirect evidence

TABLE III-9B

BLM CLASSIFICATION OF LANDS WITHIN THE OWYHEE RIVER CANYON WSA OR-3-195, MALHEUR COUNTY, OREGON FOR GEM RESOURCE POTENTIAL BASED UPON DOGAMI STUDY AND BARRINGER RESOURCES HEAVY MINERAL DATA

Commodity	Area	Classification Level	Confidence Level	Remarks
Metals	Entire WSA	3	A	Mercury
	Part of WSA	3	C	Gold & Silver
	Entire WSA	2	C	Manganese, Lead, Tin, Gold, Silver, Flourine & Molybdenum
Geothermal	Entire WSA	3	B	
Uranium/Thorium	Entire WSA	3	C	
Coal	Entire WSA	2	B	
Oil and Gas	Entire WSA	3	B	
Tar Sands/Oil Shale	Entire WSA	2	B	
Limestone	Entire WSA	1	B	
Bentonite	Entire WSA	3	B	
Diatomite	Entire WSA	3	B	
Zeolites	Entire WSA	3	B	

Classification Level:
Class 1-Lack of indications of favorability
Class 2-Low favorability
Class 3-Moderate favorability
Class 4-High favorability

Confidence Level:
Confidence Level A - Insufficient data or no direct evidence
Confidence Level B - Indirect evidence available
Confidence Level C - Direct evidence but quantitatively minimal
Confidence Level D - Abundant direct and indirect evidence

TABLE III-9C

CLASSIFICATION OF LANDS WITHIN THE OWYHEE CANYONLANDS WSAs
BASED ON U.S. BUREAU OF MINES AND
U.S. GEOLOGICAL SURVEY STUDIES OF MINERAL RESOURCE POTENTIAL

A. Owyhee River Canyon WSA (OR-3-195)

Commodity	Area	Classification Level	Confidence Level	Remarks
Metals	Part of WSA	Low	C	Silver, lead, tin
Geothermal	Part of WSA	Low	C	
Oil and Gas	Entire WSA	Unknown	A	

B. Owyhee River Canyon WSA (ID-16-48B) and Owyhee River-Deep Creek WSA (ID-16-49A)

Commodity	Area	Classification Level	Confidence Level	Remarks
Metals	Part of Deep Creek WSA	Low	C	Silver
Oil and Gas	Both WSAs	None	D	

C. Battle Creek WSA (ID-111-49E), Yatahoney Creek WSA (ID-16-49D) and Juniper Creek WSA (ID-16-52)

Commodity	Area	Classification Level	Confidence Level	Remarks
Metals	All of Battle Creek WSA	Low	D	Gold, silver, tin
	Yatahoney and Juniper Creek WSAs	Low	D	Lead, tin
Diatomite	Yatahoney and Juniper Creek WSAs	Low	D	
Oil and Gas	All WSAs	Unknown	A	

D. Little Owyhee River WSA (ID-16-48C)

Commodity	Area	Classification Level	Confidence Level	Remarks
Metals	Part of WSA	Low	C	Gold, Silver, Mercury
Zeolites	Entire WSA	Low	C	
Diatomite	Entire WSA	Low	C	
Geothermal	Entire WSA	Low	C	
Oil and Gas	Entire WSA	Unknown	A	

E. South Fork Owyhee River WSA (ID-16-53 and NV-010-103A) and Owyhee Canyon WSA (NV-010-106)

Commodity	Area	Classification Level	Confidence Level	Remarks
Metals	Both WSAs	Low	C	All metals
Oil and Gas	Both WSAs	Low	C	
Coal	Both WSAs	Low	C	
Geothermal	Both WSAs	Low	C	
Industrial rocks and minerals	Both WSAs	Low	C	Sand, gravel, stone

Definitions: Classification Level (Mineral Resource Potential) and Confidence Level (Certainty of Assessment).

Classification Level

Low: Assigned to areas where geologic, geochemical and geophysical characteristics define a geologic environment in which the existence of resources is unlikely. This broad category embraces areas with dispersed but insignificantly mineralized rock as well as areas with few or no indications of having been mineralized.

Moderate: Assigned to areas where geologic, geochemical and geophysical characteristics indicate a geologic environment favorable for resource occurence, where interpretations of data indicate a reasonable likelihood of resource accumulation, and (or) where an application of mineral-deposit models indicates favorable ground for the specified type(s) of deposits.

*Definitions are continued on following page.

High: Assigned to areas where geologic, geochemical and geophysical characteristics indicate a geologic environment favorable for resource occurence, where interpretations of data indicate a high degree of likelihood for resource accumulation, where data support mineral-deposit models indicating presence of resources, and where evidence indicates that mineral concentration has taken place. Assignment of high resource potential to an area requires some positive knowledge that mineral-forming processes have been active in at least part of the area.

Unknown: Assigned to areas where information is inadequate to assign low, moderate or high levels of resource potential.

None: A category reserved for a specific type of resource in a well-defined area.

Confidence Level

A: Available information is not adequate for determination of the level of mineral resource potential.

B: Available information suggests the level of mineral resource potential.

C: Available information gives a good indication of the level of mineral resource potential.

D: Available information clearly defines the level of mineral resource potential.

UTILITY CORRIDORS

Passing through the eastern and southern portions of the WSA complex in Idaho and Nevada is an existing right-of-way for the El Paso Gas Pipeline. This right-of-way is 25 feet wide and separates WSA ID-16-49D from ID-16-52 and NV-010-103A from NV-010-106. It also forms the eastern boundary of WSA ID-111-49E.

A one-quarter and one-mile wide utility corridor were established along the El Paso Gas Pipeline in Idaho in the Bruneau and Owyhee MFPs, respectively. The land use plan decisions limited this corridor to underground use in the vicinity of the WSAs to protect wilderness, scenic, primitive recreation (wild river) and wildlife resources. The Elko RMP established a north-south corridor along the El Paso Gas Pipeline in Nevada. This corridor is three miles wide except where it crosses the South Fork Owyhee River between WSAs NV-010-103A and NV-010-106. At this location it is limited to about 3/4 mile in width. The Elko RMP also established five-mile wide, north-south and east-west planning corridors to the south and east of Twelve Mile in WSA NV-010-106. These corridors would permit above ground (powerline) or under ground facilities.

The Northern and Southern Malheur MFPs of Oregon identified east-west and north-south planning corridors for above ground or under ground facilities to the west and north of WSA OR-3-195(ID-16-48B) in Oregon. The east-west corridor crosses the Owyhee River near Rome, Oregon.

A statewide Idaho utility corridor study is being considered to address the issue of corridor route alternatives in Idaho. This study would include corridor route alternatives in southwest Idaho in the vicinity of the Canyonlands WSAs.

ECONOMICS

The local economy studied in this EIS included: Owyhee County, Idaho; Malheur County, Oregon; and Elko County, Nevada.

Personal Income

Total personal income in the three county areas was $350.2 million in 1981. The major sectors contributing to this were Services (19%), Government (17%), Retail Trade (12%), Agriculture (10%), Manufacturing (9%), and Transportation and Public Utilities (9%) (BEA 1983).

Activities within the WSAs, primarily recreation and livestock use, generate income. The current (1982) livestock use is 185,081 AUMs in the affected allotments. Based on sales per AUM and income per dollar of sales ratios, it is estimated that the income generated by these AUMs is $1.9 million. Within the WSAs, there are 29,640 AUMs of livestock use currently. This would equate to income of $297,000.

Current recreational use within the affected allotments is not available. Current recreational use within the WSAs is estimated to amount to 1,700 user days of hunting, 2,130 user days of boating, and 200 user days of other uses (including 40 user days of backpacking). Based on expenditure per user day and income per dollar of expenditures ratios, income generated from the recreational use within the WSAs would amount to $132,000.

Employment

Total employment in the three county region was 29,950 in 1981. The major employees were Agriculture (21%), Services (16%), Government (15%), Retail Trade (12%) and Manufacturing (7%) (BEA 1983).

Based on employment per AUM ratios, it is estimated that current livestock grazing generates 52 jobs from grazing within the affected allotments and 8 jobs from the grazing within the WSAs. Employment per user day ratios would indicate that 6 jobs are being generated from the current recreational activity within the WSAs.

DAM PROPOSALS

There are currently three potential dam sites identified for the East Fork Owyhee River within Idaho (Planning Aid Report, Preliminary Biological Evaluation, Skull Creek, Duck Valley and Juniper Creek Reservoir Sites, U.S. Fish and Wildlife Service, 1985). One of these sites is located within WSA ID-16-49D in the vicinity of Oxbow Canyon. The other two sites lie upstream of the WSAs on the East Fork Owyhee River within the Duck Valley Indian Reservation. No sites have been identified on the South Fork Owyhee River. Dams could be placed on the upper Owyhee River system within Idaho only if their operation would not create a river flow situation which adversely affects the recreation values within the designated Owyhee National Wild River in Oregon (Wild and Scenic Rivers Act of 1968). The BLM recommends recreational river floating at flows between 1,000 and 6,000 cfs. River flows at Rome, Oregon reach or exceed these recommended float levels during April, May and early June. To ensure the continuation of existing or historic river recreation opportunities on the designated wild river, any upstream dam's operation could not interfere with the river's capacity of reaching flows between 1,000 and 6,000 cfs from April 1 to June 15 as measured at Rome, Oregon.

Three of the dam/reservoir proposals underwent a preliminary environmental review or study by the U.S. Fish and Wildlife Service (FWS) in 1985 at the request of the Army Corps of Engineers. The Corp of Engineers also has prepared an engineering feasibility study on the three dam sites which is due for release in 1987 or 1988. The first of the reservoir sites, the Juniper Creek Reservoir site, has a proposed 306 foot high dam located one mile upstream (T. 14 S., R. 2 W., Sec. 19) from Oxbow Canyon in WSA ID-16-49D. The dam would have a reservoir storage capacity of 202,000 acre-feet. The reservoir would flood one-quarter of the East Fork Owyhee Canyon in WSA ID-16-49D and the entire canyons of the East Fork Owyhee River and Juniper Creek in adjoining WSA ID-16-52. A second dam site, the Duck Valley Dam, would be located in the Duck Valley Indian Reservation immediately adjacent to the eastern boundary of WSA ID-16-52. This dam would be 265 feet in height and store 57,400 acre-feet of water. The third and uppermost reservoir site lies in the Duck Valley Indian Reservation at Skull Creek, Nevada. It could provide a water storage capacity of 95,500 acre-feet.

Based upon the preliminary studies, it is the conclusion of the Corp of Engineers and BLM that dam construction within the Owyhee Canyonlands WSAs is not feasible because of economic considerations and environmental constraints. Therefore, none of the dam proposals presently under consideration are incorporated into management actions in Chapter II of this wilderness EIS.

Photo by Ted Weigold

Owyhee River Canyon

WSA OR-3-195

CHAPTER IV

Owyhee River Canyon at Oxbow Canyon

WSA ID-16-49D

CHAPTER IV
ENVIRONMENTAL CONSEQUENCES

This chapter analyzes the environmental consequences of implementing each of the alternatives. Because of similar environmental conditions and issues applicable to all WSAs, the analysis refers to the WSA complex in the aggregate. Where notable impact differences occur, they are specifically addressed.

PROPOSED ACTION (PREFERRED ALTERNATIVE)

Under the Proposed Action, 377,560 acres of public land in all or portions of eight WSAs in Oregon, Idaho and Nevada (including 2,275 acres of non-WSA lands) are recommended suitable for wilderness designation. The remaining 70,782 acres are recommended nonsuitable for wilderness. Of the nonwilderness lands, 2,815 acres in Nevada would be managed under the current BLM Owyhee River Management Area administrative designation.

IMPACTS TO WILDERNESS VALUES

Naturalness

Suitable Area

Land acquisition efforts are projected to add 14,380 acres to the suitable area. Acquisition of these lands would protect existing naturalness by ensuring against potential uses that could reduce naturalness. These lands have the potential for conflicting uses including the development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions, cultivated pastures and exploration for energy and mineral resources. A wilderness designation would increase the likelihood that interlocked private lands within the river canyons would be developed for recreational purposes because of the increased notoriety of the area.

River recreation use is projected to reach 11,000 user days annually within 20 years, a 500% increase over current use. This use would occur from about 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks during the 92 days within the carrying capacity monitoring period (April 1 through June 30 of each year).

The projected trip starts on the upper Owyhee River system (above Three Forks, Oregon) would result in about 525 campsite uses per year in 20 years, a 350% increase over current use. There are several hundred campsites along the river above Three Forks which is adequate to satisfy this projected demand without overcrowding. Because of the adequate supply of campsites, increased river recreation use is projected to only slightly reduce or change vegetative cover from trampling at the upper river campsites. The trampled vegetation would be a minimal visual impact which would reduce naturalness in the vicinity of the campsites. Therefore, impacts to naturalness at the upper river campsites from increased river recreation use are projected to be minimal.

Campsites along the middle Owyhee River (between Three Forks and Rome, Oregon) are limited (23 campsites) because of the steep slopes and narrow rocky canyon. A total of 194 trips per year, an increase of 325% over current use, would increase trampling of vegetation in these campsite areas. Management under the concept of the Limits of Acceptable Change (General Technical Report INT-176, Stankey 1985), which would include issuing permits and encouraging alternate campsites, would limit trampling of vegetation (changes in natural character) to less than significant. Therefore, increased river recreation use would not significantly impact naturalness of the middle Owyhee River campsites.

Development and use of two boating launch sites would impact the natural landscape on a total of five acres. Facility construction (toilets and kiosks) would result in soil disturbance, however, revegetation of disturbed areas would occur within three years. Increased visitor use would result in the establishment of on site trails and tent pads. Toilets and kiosks would remain over the long term and would be a visual impact which would reduce naturalness in the immediate vicinity. Therefore, development and use of boating launch sites would cause minimal localized impacts to naturalness on a total of five acres.

The "45" Dam on the South Fork Owyhee River would be maintained to provide boater passage and irrigation water to private pasture lands along the South Fork Owyhee River between WSAs ID-16-48B and 16-53. Although not within a WSA, the dam and borrow pit area (two acres used for dam maintenance) are visible from the northernmost canyon area of WSA ID-16-53. Dam maintenance (replacement of dislodged rock material) would not change the appearance of the dam but would prevent revegetation of the borrow pit over the long term. The adverse visual impacts of the dam and borrow pit (vegetation removed or disturbed) would continue to cause localized reductions in naturalness over the long term on about two acres within the South Fork Canyon.

Stabilization of historic stone and wood buildings along the river system (mortaring, applying wood preservative, and re-roofing with timbers and sod) would prevent further deterioration and allow these structures to remain in place. The original design and appearance of the structures would be restored and maintained. The stabilization would not cause any additional impacts to naturalness along the river system.

Closure of 105.6 miles of roads and ways to motorized recreation use would affect naturalness. Nonuse of vehicle routes would result in the revegetation of roadbeds and wheel tracks with both grass and shrub species (primarily sagebrush) within 20 years. None of the six miles of roads and ways within the canyons are expected to have vehicle use. Though roads and ways would be closed to general public recreation use, some routes on the plateau would continue to be periodically used by livestock permittees to maintain reservoirs and fences. Based upon the geographical distribution of roads and ways and the expected need to maintain reservoirs and fences, it is projected that less than 50% of the vehicle routes on the plateau would be periodically used for this purpose. Tracking bulldozers on these roads and ways would crush the vegetation and several years would be required for

recovery. Periodic use of roads and ways would allow the wheel tracks to be revegetated with native grass species, however, even minimal use would inhibit revegetation of wheel tracks by brush species (sagebrush). The tracks would remain noticeable on the terrain at close distances for over 20 years. Because of the flatness of the terrain, the 99.6 miles of vehicle routes on the plateau are largely unnoticeable over the WSA lands as a whole. Therefore, the partial or complete revegetation of roads and ways would slightly enhance naturalness as a whole and moderately improve the natural character of the plateau. Of the total 105.6 miles of roads and ways closed to general public recreation use, 55.8 miles would fully revegetate (grass/ shrubs), while 49.8 miles would only partially revegetate (grass). Consequently, road closures would have a beneficial impact on naturalness along 106 miles of roads and ways.

The projected 500% increase in annual boating use levels (11,000 user days) combined with the 133% increase in land-based recreation activities (4,171 user days in suitable area) would increase vehicle traffic on the river access roads which would remain open. Since the access roads would be maintained to existing standards, this increased vehicle traffic would not change the visual appearance of the access roads nor add to the existing visual impact that these roads have on naturalness. Therefore, there would be no impact on naturalness from increased vehicle traffic on river access roads.

Of the total 4,171 user days projected annually for land-based recreation activities, 1,750 user days are projected for backpacking activities. This primitive recreation use would be dispersed throughout the canyons and immediately adjacent plateau rimrock areas and would have no impact on naturalness.

Maintaining and reconstructing existing rangeland management facilities (reservoirs) would impact naturalness. With a 20-year maintenance cycle for reservoirs (stock ponds), five or six reservoirs would be maintained each year using bulldozers. Reservoir maintenance/reconstruction on some WSA reservoirs under the Interim Management Policy showed that cross-country bulldozer tracks to reservoir sites recovered to a largely unseen condition within five years, and recontouring dams and dirt piles associated with the reservoirs substantially reduced the area in which the reservoirs could be seen and made them appear more like natural features; thereby reducing their impact upon the natural landscape. Localized adverse visual impacts caused by cross-country access to some sites would last from five to ten years and would generally be confined to a small area in any given year. The impacts would consist of crushed sagebrush vegetation running in two parallel lines crossing the plateau landscape which would be visible only if a person is standing on the bulldozer tracks looking up and down their length. They would remain virtually unseen from lands adjacent to the tracks because of screening by sagebrush. Because many of the reservoir sites are accessed by existing boundary roads or cherrystem roads and ways, cross-country travel impacts from bulldozers would be limited. During the short term, naturalness would be adversely impacted for about five years at each reservoir site that is maintained or reconstructed until vegetation is reestablished. Based upon these findings, maintenance and reconstruction of reservoirs would result in

a reduction in the current adverse visual impact of these reservoirs which would enhance naturalness in the vicinity of the reservoirs over the long term.

Maintenance of other rangeland facilities (fences, springs, pipelines) would continue. There would be no change in the appearance of these facilities and periodic vehicle use by livestock permittees for maintenance would continue to prevent the complete rehabilitation of roads and ways closed to general public recreation use by inhibiting the revegetation of wheel tracks by sagebrush. Therefore, maintenance of other rangeland facilities would not have an increased impact on existing naturalness.

Construction of new rangeland facilities (four reservoirs and three miles of fenceline) would affect naturalness on 130 acres in WSA OR-3-195 (including actual disturbance areas and visual zones, about 25 acres per reservoir and 10 acres per mile of fence). New reservoirs would be constructed to mitigate their localized adverse visual impacts to naturalness (low, rounded/crescent/oval forms). The visual impacts from the addition of these new facilities would be minimal since they would only be seen from over a small area and would not result in a notable impact on naturalness in the suitable area as a whole. In total, construction of new rangeland facilities would cause site specific reductions in naturalness on 130 acres.

Naturalness on the plateau would be impacted through prescribed burning (20,800 acres; 2,080 acres per year average with reburning every 20 to 30 years) and improved grazing systems. Improved grazing systems would change livestock distribution and reduce grazing pressure. The reduced grazing pressure would allow native grasses and forbs to increase in abundance and height which would reduce the grazed appearance. Prescribed burning and subsequent revegetation would further result in fewer shrubs and an additional increase in native grasses and forbs. Since the increased forage (native grasses and forbs) from prescribed burning would not be available to livestock (no increase in livestock use), overall grazing pressure would be reduced. This reduced grazing pressure would allow an additional increase in the abundance and height of native grasses and forbs which would further reduce the grazed appearance. The reductions in the grazed appearance would improve the visual quality (naturalness) of these lands. This improvement in naturalness would be greatest in Idaho where all of the prescribed burning is planned. In Oregon and Nevada, naturalness on the plateau would also improve but to a lesser degree because no prescribed burning would occur. Although there would be a temporary (one to two year) reduction in naturalness from reduced vegetation caused by burning until revegetation occurs, naturalness would be enhanced overall on 288,660 acres from improved grazing systems and on 20,800 acres from prescribed burning.

Utility corridor development would not occur on suitable lands. However, an additional pipeline adjacent to the existing El Paso gas pipeline on nonsuitable WSA lands would impact naturalness on about 515 acres of adjoining suitable lands. The impact would be a disturbance or change in the appearance of the landscape consisting of a 25-foot wide line of contrasting vegetation noticeably shorter than in surrounding areas and a dirt access road. This change in appearance would reduce naturalness over the long

term. The disturbance caused by an additional pipeline in the nonsuitable portion of WSA NV-010-103A would be visible from about 320 acres of suitable canyon/plateau lands in the northern periphery of adjacent WSA NV-010-106. The disturbance from burying the existing El Paso gas pipeline in the canyon slopes lying between these two WSAs is currently noticeable over these 320 acres and an additional pipeline adjacent to this disturbance would further reduce naturalness in the northern periphery of WSA NV-010-106. About 75 acres of plateau lands along the eastern side of Windy Point Butte in the southeast corner of WSA ID-16-49D would have naturalness further reduced by an additional pipeline. The existing pipeline disturbance is currently noticeable in this area and additional disturbance would further reduce naturalness. An additional pipeline in WSA ID-16-49D would be visible from about 120 acres of the East Fork Owyhee River canyon and plateau rimrock areas in the northwest periphery of adjacent WSA ID-16-52. The additional pipeline would be buried or suspended immediately adjacent to the existing pipeline (25 feet instead of 50 feet) within the canyon and the existing 25-foot wide disturbance would be widened by about 12 feet. During construction of the additional pipeline, the existing disturbed area would be rehabilitated (recontoured and seeded) and although the total disturbed area would be 12 feet wider, the existing disturbance would be less noticeable following rehabilitation. Suspending another pipe across the river canyon would not noticeably add to the reduced naturalness caused by the existing suspended pipe. Consequently, reductions to naturalness in WSA ID-16-52 are projected to be noticeable on 120 acres. In total, naturalness would be reduced on 515 suitable acres over the long term from an additional pipeline on nonsuitable lands adjacent to the existing El Paso gas pipeline.

Exploration activities for oil and gas resources projected on nonsuitable lands would impact naturalness on 3,800 acres of suitable lands. It is projected that three oil/gas exploration drilling sites would be established in Oregon and Idaho (one each in WSAs OR-3-195, ID-16-48C and ID-16-49A). The site in WSA OR-3-195 would not be visible from suitable lands and would only affect nonsuitable lands. Establishment of each of the two drill sites in Idaho would result in a ten-acre clearing of topsoil and vegetation for the placement of a 150 foot high drilling rig, metal storage sheds, a one-acre mud pond and miscellaneous drilling materials/equipment. Drill sites would be accessed by ways up to 1.3 miles in length. Because of the height of the drill rigs and size of the associated buildings, the drill sites would be highly visible over large acreages of the plateau. In WSA ID-16-48C, the drill site would be obvious from 1,900 acres in the northwest portion of the WSA. In WSA ID-16-49A, the drill site would be obvious from 1,900 acres in the south-central portion of the WSA. The tall, vertical forms of the drill sites silhouetted against the horizon would contrast sharply with the broad, open and relatively flat natural terrain of the plateau. The drill sites would be visible for approximately one year while drilling occurs. Once exploratory operations are completed, rehabilitation of the sites and their access ways, including the replacement of topsoil and/or the seeding of grass and shrub vegetation on the drill pads and access ways, would render the drill sites unnoticeable from suitable lands. In total, naturalness would be reduced for one year on 3,800 suitable acres during oil and gas exploration activities on nonsuitable lands.

Nonsuitable Area

Federal-state land exchanges are projected to transfer 12,360 acres of Idaho state land which adjoin nonsuitable WSA plateau lands to federal ownership. These state lands contain grass/sagebrush vegetation used primarily for livestock grazing. Whether the lands are in state or federal ownership, livestock use is projected to continue. This use of the non-WSA lands would have no impact on the naturalness of nonsuitable WSA lands. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would protect existing naturalness by ensuring against potential uses that could reduce naturalness. The easement would prevent potential development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions and cultivated pastures which could reduce the sense of naturalness found on adjoining nonsuitable WSA lands to the southeast and southwest of the property.

Development of a launch site (toilets, kiosk and road access) would cause a localized reduction in naturalness on about two acres on private land at Twelve Mile.

The 47.1 miles of cherrystem roads and ways remaining open for general public recreation use on plateau lands are projected to receive 264 user days of semi-primitive recreation use. This low level of recreation use would not increase vehicle use on the affected roads/ways to a level high enough to change the existing visual appearance of vehicle routes on the landscape. Therefore, impacts to naturalness from increased semi-primitive recreation use are not projected to increase.

No backpacking use is expected to occur across the nonsuitable plateau lands because of more desirable areas nearby. About 50 user days for backpacking would occur in the nonsuitable canyonlands and immediate plateau rimrock areas in the southern half of WSA NV-010-106. This use would have no increased impact on naturalness.

Impacts to naturalness on nonsuitable lands from the construction of six new reservoirs and six miles of fence and maintenance of existing reservoirs would be similar to but slightly greater (more adverse) than those described for suitable lands. Since less stringent environmental constraints would apply to construction and maintenance of rangeland facilities within the nonsuitable area compared to the suitable area, reservoirs and fences would not necessarily blend with the environment and would be more apparent. In total, 210 acres would have site specific reductions in naturalness due to the additional construction of five reservoirs and six miles of fence in WSA OR-3-195 and one reservoir in WSA ID-16-48C.

Naturalness on plateau lands would be affected by the implementation of grazing systems and prescribed burning (7,500 acres; 750 acres per year average with reburning every 20 to 30 years) as previously described for the suitable area except that 3,750 acres (50% of the 7,500 acres burned) would be seeded to non-native grass species using rangeland drill machinery. The increased abundance of grasses on both treated and untreated areas together with the corresponding increase in the number of livestock would maintain

rather than reduce the grazed appearance of the landscape. The 3,750 acres treated with drill machinery would suffer a severe loss of naturalness. The drill machinery would establish the seeded vegetation in a linear or striated growth pattern (cultivated appearance) which would contrast with natural growth patterns. Because land treatment within the Idaho WSAs (2,800 acres) would occur intermixed among native vegetation areas, the adverse impact to naturalness would extend over much of the nonsuitable plateau (19,780 acres) south of the Owyhee and East Fork Owyhee Rivers. It would be difficult to travel across these portions of plateau without encountering unnatural treated areas. In Oregon WSA OR-3-195, reductions in naturalness would be located in one relatively small area (1,900 acres) in the southeast portion of the WSA. It would be over 20 years before the cultivated appearance would disappear and the apparent naturalness is restored. The rate of restoration would be largely dependent upon the rate of sagebrush regeneration on seeded sites.

The El Paso corridor in Idaho and Nevada would be 1/4 mile to 3/4 miles wide along the existing El Paso gas pipeline. This pipeline is buried except where it is suspended across the Garat Gorge on the East Fork Owyhee River. The buried pipeline has a 25 foot wide right-of-way which was fully disturbed during the laying of the pipe and the subsequent establishment of a maintenance road paralleling the pipe. Construction is projected for an additional buried pipeline 50 feet to the west of the existing pipeline, except at the river crossing where the pipeline would be constructed immediately adjacent to the existing pipeline. The additional pipeline would have a constructed and maintained road along its west side, except at the river crossings where existing roads would be maintained. The additional pipeline right-of-way is also projected to have a 25 foot wide disturbance resulting in a total soil surface disturbance area within three WSAs of about 25 acres. In WSA NV-010-103A the plateau, and to a much lesser extent the canyonlands, topography slopes sharply downward toward the El Paso pipeline, thereby making the existing disturbance substantially noticeable over 2,662 acres in the WSA's southern periphery. The addition of another 25 foot wide disturbance plus the widening (12 feet more) of the pipeline disturbance across the South Fork Owyhee River Canyon would further reduce naturalness on 2,662 acres. In WSAs ID-16-49D and ID-111-49E, the existing pipeline is generally unnoticeable because the lands slope gently downward away from the pipeline. Only on a small area of about 25 nonsuitable acres on the southeast side and top of Windy Point Butte, in the southeast corner of WSA ID-16-49D, is naturalness reduced by views of the pipeline. Placement of the additional pipeline would further reduce naturalness in the Windy Point area and on about eight additional acres along the remainder of the two WSAs' southeast peripheries.

Development of the pipeline in WSA ID-16-49D would impact the naturalness of the canyon and some of the plateau in the northwest periphery of adjacent WSA ID-16-52. The existing pipeline is visible over about 200 acres of the East Fork Owyhee River canyon and adjacent plateau rimrock areas. The additional pipeline would be buried or suspended immediately adjacent to the existing pipeline (25 feet instead of 50 feet) within the canyon, and the existing 25-foot wide disturbance would be widened by about 12 feet. During construction of the additional pipeline, the existing disturbed area would be

rehabilitated (recontoured and seeded), and although the total disturbed area would be 12 feet wider, the existing disturbance would be less noticeable following rehabilitation. Suspending another pipe across the river canyon would not noticeably add to the reduced naturalness caused by the existing suspended pipe. Consequently, reductions to naturalness in WSA ID-16-52 are projected to be moderate on 200 acres.

In total, placement of an additional pipeline adjacent to the existing El Paso gas pipeline would moderately to severely reduce naturalness on 2,895 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52 and NV-010-103A.

The Twelve Mile corridor in Nevada (WSA NV-010-106) would be a five mile wide corridor which would extend from Twelve Mile southward to the WSA's southern boundary at the "YP" Ranch. It is projected that two high voltage powerline systems would traverse southwest-northeastward through the corridor, paralleling each other at a distance of one mile. It is estimated that at least 27 towers would be placed in the WSA at a distance of about 1,300 feet apart. Twenty-seven towers 150 feet high and 90 feet wide would be substantially visible over the entire nonsuitable southern plateau area (7,150 acres) of the WSA. In addition, about 200 acres of canyonlands in the southern portion of the WSA would be visually impacted by towers standing adjacent to the rimrock and by powerlines, with brightly colored warning balls, stretching across the sky above the canyon walls. The visual presence of these powerline systems would substantially reduce naturalness on 7,350 acres of plateau and canyon.

Because nonsuitable areas have low mineral potentials, no mineral prospecting activity is projected.

Exploration activities for oil and gas resources are projected to occur on WSA lands recommended nonsuitable for wilderness designation. It is projected that three oil/gas explorational drilling sites would be established in Oregon and Idaho (one each in WSAs OR-3-195, ID-16-48C and ID-16-49A). It is also projected that "thumper" trucks would be used in three to five mile square grids for seismic testing of underlying rock strata. Establishment of each drill site would result in a ten-acre clearing of topsoil and vegetation for the placement of a 150 foot high drilling rig, metal storage sheds, a one-acre mud pond and miscellaneous drilling materials/equipment. Drill sites would be accessed by ways up to 1.3 miles in length. Because of the height of the drill rigs and sized of associated buildings, the drill sites would be highly visible over large acreages of the plateau. In WSA OR-3-195, the drill site would be obvious from at least 3,200 acres in the southeast portion of the WSA; in WSA ID-16-48C, the drill site would be obvious from 3,500 acres in the northwest portion of the WSA; in WSA ID-16-49A, the drill site would be obvious from at least 2,800 acres in the south-central portion of the WSA. Within the three WSAs, naturalness would be reduced on a total of 9,500 nonsuitable acres. All but 1,300 acres (in WSA OR-3-195) of these 9,500 acres would also have a loss of naturalness due to drill seedings. The tall, vertical forms of the drill sites silhouetted against the horizon would contrast sharply with the relatively flat natural terrain on the plateau. The drill sites would be visible from additional nonsuitable acreage, however, adverse impacts on these acreages

are expected to be minimal. Once exploratory operations are completed, rehabilitation of the sites and their access ways, including replacement of topsoil and/or seeding grass and shrub vegetation on the drill pads and access ways, would render the drill sites to a substantially natural condition within three to five years. Complete restoration would be expected to occur within 20 years.

Thumper truck grids would produce moderate amounts of sagebrush crushing in paralleling grids every three to four miles across plateau lands. Sagebrush crushing would be noticeable for a period of five years in close proximity to the grid lines, but would not be substantially noticeable on the lands as a whole nor in the long term.

Conclusion

In the suitable area, naturalness would be reduced for one year on about 3,800 acres on the plateau during oil/gas exploration drilling operations on adjacent nonsuitable lands. Construction of new reservoirs and fences would permanently reduce naturalness on 130 acres. Naturalness on 515 acres would be permanently reduced or lost by visual intrusions from pipeline development on nonsuitable lands within the El Paso corridor. Over the long term, naturalness within the suitable area would be slightly enhanced along 105.6 miles of road/way closures, enhanced on 20,800 acres from prescribed burning (Idaho), enhanced on 288,660 acres from improved grazing systems and enhanced locally from maintenance of existing reservoirs.

Table IV-1

ADVERSE IMPACTS TO NATURALNESS - PROPOSED ACTION

W S A	SUITABLE AREA					NONSUITABLE AREA					WSA TOTAL				
	VEG. TRT.	UTILITY	MIN.	ENERGY	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL
OR-3-195 (ID-16-48B)	0	0	0	0	0	1,900	0	0	1,300 (1,900)	3,200	1,900	0	0	1,300 (1,900)	3,200
ID-16-48C	0	0	0	1,900	1,900	16,140	0	0	(3,500)	16,140	16,140	0	0	1,900 (3,500)	18,040
ID-16-49A	0	0	0	1,900	1,900	3,440	0	0	(2,800)	3,440	3,440	0	0	1,900 (2,800)	5,340
ID-16-49D	0	75	0	0	75	200	28	0	0	228	200	103	0	0	303
ID-111-49E	0	0	0	0	0	0	5	0	0	5	0	5	0	0	5
ID-16-52	0	120	0	0	120	0	200	0	0	200	0	320	0	0	320
ID-16-53 (NV-010-103A)	0	0	0	0	0	0	2,662	0	0	2,662	0	2,662	0	0	2,662
NV-010-106	0	320	0	0	320	0	7,350	0	0	7,350	0	7,670	0	0	7,670
TOTALS 1/	0	515	0	3,800	4,315	21,680	10,245	0	1,300	33,225	21,680	10,760	0	5,100	37,540

1/ Acreage does not include areas of small localized impact caused by reservoir or fence construction, "45" dam maintenance, boating launch site development, road/way development or recreation use.

2/ Parentheses () around energy numbers indicate acreages also affected by vegetative treatments. Energy acreages are not included in totals to prevent double counting.

In the nonsuitable area, naturalness would be permanently reduced or lost on 2,895 acres from pipelines and on 7,350 acres from powerlines. Naturalness would be reduced for over 20 years on 21,680 acres from vegetation treatments (mechanical drilling of non-native grass species). Some of this acreage (8,200 acres), plus an additional 1,300 acres (9,500 acres total) would have naturalness reduced for up to one year while oil/gas exploration drilling rigs are operating. Naturalness would be permanently reduced on 210 acres from new reservoir and fence construction.

Solitude Opportunities

Suitable Area

Acquisition of 14,380 acres of non-federal lands would ensure that these lands, particularly private lands (1,720 acres) within the river canyons, are not developed or used for activities which could reduce solitude on adjoining WSA lands. Currently all of these lands are used for livestock grazing and occasional recreation. Wilderness designation, and its accompanying notoriety, could result in one or more of the private land parcels in the river canyons (all of which are accessed by roads) being developed as a commercially operated, recreation oriented lodge or resort if the lands are not acquired. Such development could substantially reduce solitude opportunities on a localized basis as human activity increases. Since these lands would be acquired and development would be precluded, opportunities for solitude would not be affected.

River running recreation use is projected to reach 11,000 user days annually (Table IV-2). This use is expected to occur during an optimum 45-day float period sometime between April 1 and June 30 of each year depending upon climate and river flow conditions. The use would occur from 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks. On an average, this amount of use would equate to one trip starting on the East Fork every two days and on the South Fork about once or twice per day. In a good water year, currently the East Fork gets five trips per year (one launch every nine days); the South Fork gets ten trips (one launch every five days), the main stem Owyhee River gets 35 trips (one launch every one to two days). This change in launch frequency over 20 years would be a 500% to 1000% increase in the potential for recreation user group interaction. Because the rate of travel for each float party would be the same for the East Fork and South Fork, those groups starting from the upper river launch sites (WSA ID-16-49/52 and NV-010-106) would generally not encounter each other while floating on the two forks of the river. Float group interaction would generally begin on the Owyhee River in WSA ID-16-48B below the confluence of the East-South Forks where boating parties merge together. Presently, the merging of float trips on the Owyhee River results in less than one interaction between parties between the confluence and the Three Forks take-out/put-in. In 20 years, the expected group interaction would increase to five or more on this section of river. Below Three Forks in WSA OR-3-195, a launch schedule of four trips per day would raise group interaction rates

from a current rate of less than one per day to four or more per day. Such increases in float group interaction would cause a notable loss in opportunities for solitude.

Backpacking use is projected to reach 1,750 user days annually in canyonlands and associated plateau rimrock areas. About 50% of the backpacking use would occur in the spring when river running activities are also occurring. The remainder of the backpacking use would occur during the fall. Presently, little or no interaction between boaters and hikers occurs due to the minimal amount of use and the fact that backpacking primarily occurs in tributary canyons such as Deep Creek, Battle Creek and Louse Canyon. In 20 years, it is projected that backpacking use would remain largely in tributary canyons. Backpacking/boating group interaction in the river canyons should remain at less than one per trip in the East Fork, South Fork and main stem Owyhee River system, therefore, backpacking use would minimally contribute to reductions in solitude opportunities.

Table IV-2

PROJECTED RECREATION USE BY WSA BY ALTERNATIVE

WSAs	Estimated Recreation Use in 1982					Projected Recreation Use (24 hour user days) within 20 years														
	Primitive Recreation			Semi-Primitive Motorized 1/		Water-Based Use	Land-Based Use													
							Proposed Action			No Action (No Wilderness)			Canyonlands Wilderness			Wildlife Wilderness			All Wilderness		
	River Use		Back-packing 1/			River Use:All Alternatives 3/	Back-packing 4/	Hunting	Other 5/	Back-packing 4/	Hunting	Other 5/	Back-packing 4/	Hunting	Other 5/	Back-packing 4/	Hunting	Other 5/	Back-packing 4/	Hunting	Other 5/
	Carrying Capacity	Actual Use		Hunting	Other 2/															
ID-16-52	None	20	10	51	0	100	70	90	10	40	90	10	40	90	10	70	90	10	70	90	10
ID-16-49D and ID-16-49A	4,095	118	20	306	30	608	400	430	40	270	520	50	270	500	50	400	400	40	400	400	40
NV-010-106, ID-16-53 (NV-010-103A) plus some of ID-16-48B	4,095	470	0	289	30	2,434	300	400	40	200	490	50	200	490	50	300	450	40	300	350	35
OR-3-195 (ID-16-48B) Above Three Forks	5,460	392	10	833	80	2,028	800	1,120	110	550	1,420	135	550	1,400	115	800	1,300	125	800	1,000	95
Below Three Forks	16,380	1,130				5,830														
ID-111(16)-49E	6/	0	0	119	0	0	200	180	20	140	200	20	140	200	20	200	180	20	200	180	20
ID-16-48C	6/	0	0	102	0	0	30	180	15	20	180	15	20	180	15	30	180	10	30	180	15
WSA TOTALS	30,030	2,130	40	1,700	160	11,000	1,800	2,400	235	1,220	2,900	280	1,120	2,860	280	1,800	2,600	245	1,800	2,200	215
ALTERNATIVE TOTALS	---	---	--	---	---	11,000	4,435			4,400			4,260			4,645			4,215		

1/ No carrying capacity established for backpacking or semi-primitive motorized activities (hunting, rock hounding, sightseeing, vehicle camping).
2/ Includes rock hounding, sightseeing and vehicle camping.
3/ River recreation (whitewater boating) is expected to increase the same under wilderness or wild river designation.
4/ Includes horseback and llama use.
5/ Includes rock hounding, sightseeing and vehicle camping.
6/ The Owyhee River and South Fork Owyhee River do not flow through these WSAs.

When boaters and backpackers travel the river launch site access roads to reach the canyon areas, they will interact with those engaging in other primitive recreation or semi-primitive recreation experiences (mostly sightseeing in the spring, and mostly hunting in the fall). Semi-primitive recreation use is projected to reach 2,371 user days in 20 years. The combined activities of the boaters/sightseers or backpackers/hunters, etc. at the river launch sites would produce almost daily use of these sites and cause a localized reduction in solitude opportunities. Construction of

minimal recreation facilities at two launch sites (toilets and kiosks) would not contribute to increases in recreation use. The facilities would mitigate public health and safety concerns generated by increased recreation use.

In some canyon areas and on the plateau lands surrounding the canyons, 105.6 miles of roads and ways would be closed to motorized recreation use. These closures would slightly increase solitude opportunities yet few recreationists are expected to benefit from this opportunity because most primitive recreation activities would be occurring in close proximity to the canyon rimrocks away from much of the closed plateau vehicle routes.

Rangeland management actions would have no increased impact on solitude opportunities. These actions include construction and maintenance of rangeland projects (fences and reservoirs) and vegetative manipulation. The amount of human activity associated with these activities, as well as day-to-day grazing system management, is not expected to change enough to affect current opportunities for solitude over the long term.

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor. Opportunities for solitude on lands adjoining the utility corridors would be temporarily (1.5 months) reduced on 515 acres in WSAs ID-16-49D, ID-16-52 and NV-010-106 due to human activity while construction is occurring. Once construction is completed, occasional use on the utility maintenance roads or ways for motorized recreation and facility maintenance would have no impact on opportunities for solitude.

Oil and gas exploration activity at exploratory drill rig sites would be seen and heard over about 3,800 suitable acres in WSA ID-16-48C and ID-16-49A for a period of nine to twelve months. This activity would reduce solitude opportunities during the period of exploratory drilling. Following the completion of exploration activities, solitude opportunities would return to pre-exploration conditions.

Nonsuitable Area

Acquisition of 12,360 acres of Idaho state lands would have no impact on solitude opportunities. These lands would continue to receive only occasional human activity associated with livestock grazing and semi-primitive motorized recreation use. Other non-federal land acquisition includes a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106. Following easement acquisition, management actions include constructing minimal recreation facilities (toilet and kiosk) and improving road access to make the area a boating launch site. Acquisition would also prevent potential commercial lodge development which would maintain existing solitude opportunities.

The launch site (road improvement, toilet and kiosk) at Twelve Mile in WSA NV-010-106 would be built on private lands under the authority of a recreation easement. Development of this new launch site would help disperse river recreation use along the upper South Fork Owyhee River in WSA NV-010-106 and ID-16-53(NV-010-103A), and enhance solitude opportunities in this area.

Land-based recreation is projected to reach 50 annual user days of backpacking use along the South Fork Owyhee River Canyon and rimrock area and 264 user days of semi-primitive motorized recreation use (principally hunting and some sightseeing) on the plateau where existing roads/ways would remain open for motorized use. This level of recreation use (a 133% increase) would not noticeably contribute to a reduction in solitude opportunities, even in the South Fork Owyhee River Canyon where river recreation is occurring.

Rangeland management actions would have no increased impact on solitude opportunities. The amount of human activity associated with construction and maintenance of fences and reservoirs, vegetative manipulation, and day-to-day grazing system management is not expected to change enough to affect current opportunities for solitude.

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor. Opportunities for solitude within the corridors would be temporarily (1.5 months) reduced during the construction period on 2,895 acres of the El Paso corridor in WSAs ID-16-49D, ID-16-52, ID-111-49E and NV-010-103A and on 3,675 acres of the Twelve Mile corridor in WSA NV-010-106. Once construction is completed, occasional vehicle use on the two new ways developed along the Twelve Mile corridor powerlines in the southern portion of WSA NV-010-106 would slightly reduce solitude opportunities, principally during fall hunting. Though the El Paso corridor pipeline construction would result in a new road, it would immediately parallel an existing maintenance road. The new road would offer an alternate travel route in a currently traveled area rather than a new route in an untraveled area. Therefore, the new pipeline is not projected to result in increased motor vehicle use or in loss of solitude opportunities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. Human activity at the exploratory drill rig sites would be seen and heard over about 9,500 acres in the three WSAs for a period of nine to twelve months. This exploration activity would reduce solitude opportunities during the period of operation. Following completion of exploration activities, solitude opportunities would return to pre-exploration conditions.

Conclusion

On suitable lands, a slight increase in solitude opportunities would occur in some canyon areas and across the plateau as a result of closing 105.6 miles of roads and ways to motorized recreation. Notable localized reductions in solitude opportunities are projected in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to increased float group interactions. Localized reduction in solitude opportunities are projected at the boating launch sites where vehicle access along maintained roads would concentrate recreation use and cause frequent interaction between visitors. Short-term (1.5 month) reductions in solitude opportunities are projected on 515 suitable acres in WSAs ID-16-49D, ID-16-52 and NV-010-106 during pipeline construction on adjoining nonsuitable lands along the El Paso corridor. A total of 3,800 suitable acres would also have a temporary (nine to twelve

months) reduction in solitude opportunities during oil and gas exploratory drilling on adjoining nonsuitable lands in WSAs OR-3-195, ID-16-48C and ID-16-49A.

On nonsuitable lands, a temporary (1.5 months) reduction in solitude opportunities would occur on a total of 2,895 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52 and NV-010-103A during pipeline construction along the El Paso corridor. An additional 3,675 acres in WSA NV-010-106 would have solitude opportunities temporarily (1.5 months) reduced during powerline construction in the Twelve Mile corridor. A slight reduction in solitude opportunities would continue in this WSA as semi-primitive motorized recreation use occurs along vehicle routes established during powerline construction. Another 9,500 acres of nonsuitable lands in WSAs OR-3-195, ID-16-48C and ID-16-49A would have solitude opportunities temporarily reduced (nine to twelve months) during oil and gas exploratory drilling activities.

Primitive Recreation Opportunities

Outstanding primitive recreation experiences exist only on those lands which contain a high degree of naturalness and offer a high degree of solitude opportunities. Changes in either the degree of naturalness or solitude opportunities change primitive recreation opportunities. In the Owyhee Canyonlands WSA complex, opportunities for primitive recreation experiences would change on the same acreage where changes in naturalness or solitude opportunities occur. Naturalness and solitude opportunity impact areas generally coincide with each other except in the canyon areas where solitude impacts occur from recreation user group interaction.

Suitable Area

Acquisition of 14,380 acres of non-federal lands would enhance opportunities for primitive recreation by ensuring that these lands remain natural in character and are not eventually developed with conflicting uses which could reduce opportunities for solitude.

In the canyon areas, a slight localized reduction in primitive recreation opportunities would accompany reductions in solitude opportunities caused by increases in boating group interaction along the Owyhee River in WSA OR-3-195 (ID-16-48B), and by increased interaction between boaters and others who use the maintained roads into the various boating launch sites.

Maintenance of the "45" Dam would allow the existing localized loss of naturalness in the South Fork Owyhee Canyon at the northern edge of WSA ID-16-53 to continue. This loss of naturalness locally reduces existing primitive recreation opportunities because river runners must scout and run or line/portage an unnatural structure which blocks the otherwise free-flowing river system. Therefore, maintenance of the "45" dam would not impact the existing level of primitive recreation opportunities.

Stabilization of historic sites (stone buildings and wood cabins) along the river would benefit primitive recreation opportunities by ensuring the continued enjoyment of viewing these structures for their cultural value.

Though not natural in character, they stand as examples of how civilization has come and gone from the Owyhee Canyonlands and heighten the sense of harsh conditions and challenge associated with traveling and living in the area.

In some canyon areas and on the plateau, primitive recreation opportunities would be enhanced slightly over the long term as enhanced naturalness (revegetated wheel tracks) and increased solitude opportunities (elimination of motorized recreation) occur from the closure of 105.6 miles of roads and ways.

Rangeland management actions include prescribed burning, implementing grazing systems, and maintaining reservoirs (reconstructing to higher visual standards). Prescribed burning and implementing grazing systems would increase the abundance and height of native grasses and forbs and reduce the grazed appearance which would enhance naturalness across the plateau. Maintaining reservoirs (which would make them appear more like natural features) would reduce their current visual impact and enhance naturalness locally. This enhanced naturalness from rangeland management actions would slightly enhance primitive recreation opportunities on 288,660 acres across the plateau over the long term.

Construction of four new reservoirs and three miles of fence in WSA OR-3-195 would cause localized reductions in naturalness on 130 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area over the long term.

Development of the El Paso corridor for buried pipelines, though occurring on nonsuitable lands, would be visible from about 515 acres of suitable lands in WSAs ID-16-49D, ID-16-52 and NV-010-106. The visual evidence of the pipeline (contrasting vegetation) would cause these lands to be less natural in character over the long term. This loss of naturalness would also permanently reduce primitive recreation opportunities on the 515 suitable acres. Losses in solitude opportunities would occur only during the construction period (1.5 months).

Temporary (nine to twelve months) activity at oil and gas exploratory drill sites on nonsuitable lands in WSAs ID-16-48C and ID-16-49A would be visible from about 3,800 acres of suitable lands in the two affected WSAs. The activity would cause localized reductions in both naturalness and solitude opportunities over these 3,800 acres during the short term. The reduced naturalness and solitude opportunities would also reduce primitive recreation opportunities during the short term over these acres. A third drill site on nonsuitable lands in WSA OR-3-195 would not be visible from suitable lands in this WSA.

Nonsuitable Area

Acquisition of 12,360 acres of Idaho state lands would have no impact on the primitive recreation opportunities since recreation activities would be allowed to continue. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would prevent potential conflicting uses and maintain naturalness and solitude opportunities which would enhance primitive recreation opportunities.

Construction of a boating launch site (improved road access, toilet and kiosk) at Twelve Mile in WSA NV-010-106 under the authority of a recreation easement would facilitate the dispersion of primitive recreation use on the upper South Fork Owyhee River; thereby enhancing primitive recreation opportunities through improved solitude opportunities.

Construction of five new reservoirs and six miles of fence in WSA OR-3-195 and one reservoir in WSA ID-16-48C would cause localized reductions in naturalness on 120 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area.

On the plateau, 21,680 acres would have primitive recreation opportunities reduced because of losses in naturalness due to the cultivated appearance associated with mechanical drill seeding in native vegetative communities.

Development of the El Paso and Twelve Mile corridors for buried pipelines or overhead powerlines would reduce primitive recreation opportunities. In WSAs ID-16-49D, ID-111-49E, ID-16-52 and NV-010-103A, 2,895 acres in the El Paso corridor would have primitive recreation opportunities moderately to severely reduced because of a loss of naturalness caused by the visual presence of another pipeline disturbance. Solitude losses would be temporary (1.5 months) during facility construction. Development of powerlines in the Twelve Mile corridor within WSA NV-010-106 would also moderately to severely reduce primitive recreation opportunities over 7,350 acres because of the loss of naturalness caused by the persistent views of the powerlines coupled with a slight loss in solitude opportunities due to some use of powerline access ways for motorized recreation activities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. This activity would be visible over 9,500 acres of surrounding nonsuitable lands, resulting in a temporary (nine to twelve month) loss of primitive recreation opportunities due to losses in naturalness and solitude opportunities.

The use of "thumper" trucks to do seismic testing on a grid pattern across plateau lands would also cause some reduction in primitive recreation opportunities for a period of five years as the naturalness of native vegetation recovers from vehicle track damage.

Conclusion

Primitive recreation opportunities on suitable lands would generally be retained as a whole. A slight enhancement in primitive recreation opportunities would occur across the plateau and in some canyon areas as a result of closing 105.6 miles of roads and ways to motorized recreation use, and across the plateau as a result of prescribed burning, grazing systems and reservoir maintenance. Some localized reduction in primitive recreation opportunities would occur in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to projected increases in river boating use. Localized reductions in primitive recreation opportunities would also occur at boating launch sites where vehicle access along maintained roads would concentrate

recreation use. Construction of four new reservoirs and three miles of fence would locally reduce primitive recreation opportunities on 130 acres in WSA OR-3-195. Suitable lands totalling 515 acres in WSAs ID-16-49D, ID-16-52 and NV-010-106 would have primitive recreation opportunities permanently reduced from new pipeline construction on adjoining nonsuitable lands in the El Paso corridor. About 3,800 suitable acres in WSAs ID-16-48C and ID-16-49A would have primitive recreation opportunities temporarily (nine to twelve months) reduced during oil and gas exploration activity on adjoining nonsuitable lands.

On nonsuitable lands, permanent reductions in primitive recreation opportunities would occur on 2,895 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52 and NV-010-103A from construction of a new pipeline in the El Paso corridor. Another 7,350 acres would have primitive recreation opportunities permanently reduced by powerline construction in the Twelve Mile corridor in WSA NV-010-106. About 21,680 acres of nonsuitable plateau would have primitive recreation opportunities reduced for over 20 years by mechanical drill seeding in native vegetation communities. Construction of six new reservoirs and six miles of fence would locally reduce primitive recreation opportunities on a total of 210 acres. Losses in primitive recreation opportunities would occur for a period of nine to twelve months on a total of 9,500 nonsuitable acres within WSAs OR-3-195, ID-16-48C and ID-16-49A while oil and gas exploration activities are occurring.

Special Features (Bighorn Sheep)

Suitable Area

Acquisition of land along the Owyhee River, Battle Creek and Deep Creek would enhance management and protection of bighorn sheep. Acquisition would ensure that potential resource uses on these lands would not adversely impact bighorn sheep in adjoining suitable areas.

It is projected that in 20 years river boating use would reach 11,000 user days annually (a 500% increase over present levels). Use on the East Fork Owyhee River would increase from an average of one trip every eight days to one trip every two days during the peak boating period. During the same period, the South Fork would increase to nearly two trips every day. At Three Forks, use would increase to four trips a day. These increases in use would be very gradual, and bighorn sheep would be able to adjust to this increased use because the sheep would primarily be at the upper levels of the canyon walls and the boaters would be down on the river. Sheep were found to be curious of boaters along the Colorado River as long as boaters stayed in the boats (Manson and Summer 1980). Human activity at favorite "camp spots" along the river would cause temporary displacement of sheep in the vicinity of the camp spots while human activity is occurring, but this displacement would be minor and would not effect bighorn sheep populations over the long term.

Under the various alternatives, recreation user day projections for primitive and semi-primitive recreation activities other than whitewater boating range from 4,215 to 4,645 user days (4,435 for the Proposed Action)

annually within 20 years. Much of this use, including all 1,120 to 1,800 user days for backpacking/horsepacking (1,800 for the Proposed Action) and 50% or more of the hunting use (1,100 to 1,450 user days with 1,200 for the Proposed Action), would occur in association with canyon and plateau areas used by bighorn sheep. These recreation use levels could result in behavioral and/or physiological impacts to bighorn sheep. Studies by the U.S. Forest Service and California Department of Fish and Game (Light 1971, Graham 1971) have shown that human use of desert bighorn sheep habitat in excess of 500 visitor days (a visitor day being one 12 hour visit) can cause bighorn sheep to withdraw from their ranges. Another study of California bighorn sheep habitat in the Sierra Nevada Mountains (Dunaway 1971) identified gaps between five bighorn sheep ranges corresponding to areas of high human use. Three of these ranges also suffered losses in population numbers after major increases in recreation use, while the populations in the other two ranges not exposed to surges in recreational use remained stable.

The tolerance of human activity by bighorn sheep can vary dramatically from one population to another. This variation depends upon many factors including the duration, frequency, location, season and nature of the disturbance and past experiences of the population and the individual mature sheep, particularly the herd leader. In the case of the Owyhee Canyonlands WSAs, the timing, location and frequency of recreation use are all of major concern. Over 50% of the projected backpacking/horsepacking use is expected to occur during the cooler, moist spring months during the bighorn lambing period when they are especially sensitive to disturbance. All of the hunting use would occur in the fall months in conjunction with backpacking and horsepacking use. Unlike the projected river boating use, much of the backpacking/horsepacking and hunting use would be located along the canyon rimrocks and in the major tributary canyons at or above the same topographical level where the bighorn sheep population normally resides. This topographic interrelationship between recreation users and bighorn sheep has been observed to cause greater distress than if recreation activities, such as boating, are confined to areas below the bighorns (Manson and Summer 1980). Consequently, projected backpacking/horsepacking and hunting use, combined with boating use, could cause disturbance to bighorn sheep populations under all alternatives presented in this EIS. This disturbance would result in displacement of portions of the population into canyon areas to the north of the WSA complex unless the bighorn sheep are able to slowly adjust to human activity as recreation use increases.

Closure of 105.6 miles of roads and ways would limit access to the canyon rims. The closures would reduce human activity and vehicle noise in the interior of the suitable area. Since public access to the river system would be restricted to only a few spots, disturbance would be localized, resulting in reduced human disturbance to bighorn populations in the canyons and adjacent plateau rimrock areas. Since human traffic would be reduced, stress on the animals would also be reduced.

Since state wildlife management agencies would continue wildlife population management practices under each alternative, California bighorn sheep populations are projected to grow and serve as a source for transplants to other areas. Use of helicopters for trapping and transplanting bighorn

sheep would continue to support establishment and expansion of the population. Maintenance of existing road networks between and adjacent to the WSAs would allow vehicle access for state game agencies to carry out transplanting programs.

Prescribed burning would be beneficial to bighorn sheep, especially where areas are burned within two miles of the canyon rims and with no increase in livestock use in the suitable areas. The burns would open up dense sagebrush stands and allow native grasses and forbs (Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox) to increase. This improved range condition on the plateau would increase forage availability and improve overall habitat conditions (forage/cover ratio) for bighorn sheep.

Construction of new reservoirs would improve bighorn habitat and their distribution. Although reservoirs near the canyon would be 1/2 to 1 mile from the canyon rims, they would still improve distribution for bighorn as well as livestock. These reservoirs will allow for more even utilization of the forage by both livestock and bighorns on the plateaus.

Based on current population estimates, projected recreation increases, available habitat, new reservoirs and improvements in range conditions, bighorn sheep populations are projected to reach 900-1,200 animals in 20 years, a 300% increase over present levels.

Nonsuitable Area

Human activity associated with pipeline construction near the canyon in WSAs ID-16-49D and ID-16-52 (El Paso corridor) would cause localized disturbance and short-term displacement (1.5 months) of sheep adjacent to the pipeline corridor but would not affect population numbers.

Conclusion

In the suitable area, land acquisition along the Owyhee River, Battle Creek and Deep Creek would ensure that bighorn sheep in adjacent areas are not adversely impacted. Roads and ways closed on suitable lands would decrease disturbances to bighorn sheep populations, especially along the canyon rims. Increased recreation use could disturb bighorn sheep populations and cause displacement over the long term. On nonsuitable lands, pipeline construction across the canyon in WSAs ID-16-49D and ID-16-52 would cause short-term displacement of bighorn sheep. Within the WSA complex, bighorn sheep populations are projected to expand into available unoccupied habitat. The population projection over the next 20 years is 900 - 1,200 animals.

Special Features (Cultural Values)

Suitable Area

Closure of 105.6 miles of roads and ways to motorized recreation and elimination of off-road vehicle use would reduce the current adverse impacts

to cultural resources by reducing motorized access to sites now subject to acts of vandalism and theft, particularly along the canyon rim.

The projected 20 year boating use levels of 11,000 user days annually would mean that each of the major historic site complexes as well as considerable numbers of prehistoric lithic scatters, multi-functional campsites, rockshelters and rock art sites within the river canyons would be visited by parties of up to 15 people on an average of once every two days on the East Fork of the Owyhee River; twice a day on the South Fork; and four times a day below Three Forks during the peak use period of April 1 through June 30. While public education and information efforts would discourage most people from acts of vandalism and theft, the number of such acts would likely increase as visitor use rises over the next 20 years.

Land acquisition actions would have a beneficial impact on cultural resources. Five significant historic site complexes located in the river canyons would be acquired. These sites are important not only for their scientific research potential but for the outstanding recreational/aesthetic values they possess. Acquisition of private lands removes the possibility that sites on those lands would be disturbed or destroyed as a result of commercial recreational development.

Stabilization of 8 historic structures within the river canyons (5 on private lands, 3 on BLM lands), would have a substantial beneficial impact on cultural resources by reducing the current deterioration of significant properties, enhancing the aesthetic qualities of the area for visitors, and preserving scientific information on historic settlement patterns and lifeways for future study.

Within suitable areas, livestock use would remain at approximately current levels, but redistribution of livestock following implementation of grazing systems would disperse livestock over a broader area and slightly reduce livestock trampling of cultural resources.

Vegetative manipulation, installation of range improvements (reservoirs and fences) and construction of recreational facilities (toilets, kiosks and signs) are all actions which have potential to disturb or destroy cultural resources which lie within their immediate impact areas. Should a significant site be discovered during any of these actions, potential impacts would be mitigated in advance of project construction after consultation with the State Historic Preservation Officer. Appropriate mitigating measures might include avoidance of a site by relocating or not authorizing a project, modification of a project to eliminate impacts, test or salvage excavation of endangered portions of a site, or merely recording a site. Once mitigation has been determined, project implementation is normally considered to have no impact on cultural resources. Subsequent reference to "normal compliance procedures" describes this inventory/evaluation/mitigation sequence.

Nonsuitable Area

Improving the road through private land at Twelve Mile would allow for a moderate localized increase in theft and vandalism of cultural resources in a

formerly little-visited area. Acquisition of a 280 acre recreation easement at Twelve Mile would benefit cultural resources by removing the possibility that sites within the easement would be disturbed or destroyed as a result of commercial recreational development. Acquisition of this easement would also allow BLM to reduce deterioration of historic structures at Twelve Mile through stabilization and protection.

Livestock use on nonsuitable areas would rise less than 5% overall and increased damages to cultural resources as a result of increased trampling and related erosion would be slight. This slight increase in trampling damage would be moderated by implementing grazing systems which would redistribute impacts over a broader area.

Moderately increased localized levels of vandalism and theft of cultural resources would occur as a result of development of new vehicle ways (access roads) associated with the new powerlines in the vicinity of Twelve Mile in Nevada. Slight short-term (nine to twelve months) localized increased vandalism and theft of cultural resources would also occur in the vicinity of the access roads to three oil and gas exploratory drill sites in Oregon and Idaho.

Vegetative manipulation (burning and plowing and seeding with rangeland drills) installation of range improvements (reservoir and fence construction) construction of a pipeline adjacent to the existing El Paso Gas Pipeline, and construction of recreational facilities (toilets, kiosks and signs) are all actions which have potential to disturb or destroy cultural resources. However, all of these actions would be satisfactorily mitigated through normal compliance procedures and therefore would have no impact on cultural resources.

Conclusion

Within the suitable area, vandalism and theft of cultural resources would be reduced by road and way closures. Increases in boating use would lead to increased levels of vandalism and theft in the river canyon areas over time. Acquisition of private lands containing five historic sites, and stabilization and protection of structures at those sites plus three sites on BLM lands would reduce the deterioration of significant resources and enhance the recreational/aesthetic experience for river users. Livestock would be distributed over a broader area and trampling of sites would be reduced slightly.

In the nonsuitable area, moderate localized increases in vandalism and theft at cultural sites would occur as a result of road improvement through private land at Twelve Mile in Nevada and as result of new access roads associated with powerline development in Nevada. Slight short-term (nine to twelve months) localized increases in vandalism and theft would occur in the vicinity of the access roads to the oil and gas exploratory drill sites in Oregon and Idaho.

IMPACTS TO THE CONDITION AND AMOUNT OF NATIVE VEGETATION

Suitable Area

Several sensitive plant sites would come under federal jurisdiction and protection as a result of land acquisition or exchange actions. Hedgehog cactus (Echinocactus simponsi), Inch-High Lupine (Lupine uncialus) and Bailey's Ivesia (Ivesia baileyi) are known to occur on state and private lands that are proposed for acquisition or exchange. There would be no impacts to these species from wilderness designation since there are no management actions which would affect these plants.

Development and use of two boating launch sites would impact vegetation in the canyons. Vegetation would be removed during construction of toilets and kiosks at these sites. Increases in recreation use would increase trampling and result in the establishment of trails and tent pads in the vicinity of the sites. Vegetative cover in the vicinity of the two launch sites would be lost over the long term on a total of five acres.

Increased recreation use would affect vegetation along two sections of river canyons; the upper South Fork Owyhee River in WSA NV-010-106 and the middle section of the Owyhee River in WSA OR-3-195. In these river sections, increased boating use combined with limited campsite availability would result in trampling and loss of vegetative cover on a total of five acres at the campsites.

Maintenance of the irrigation dam servicing the "45" Ranch on the South Fork Owyhee River would result in minimal disturbance. The established road would be used to move any needed equipment to the site. A small area of less than two acres has been set aside to provide fill for dam maintenance and vegetation at this site would be lost.

Livestock grazing use would remain at approximately predesignation levels. To restore or maintain the ecological condition of vegetation, management actions call for prescribed burning on areas in poor and fair ecological condition and improving livestock grazing systems. Areas in good ecological condition (109,610 acres) would not be treated.

Prescribed burning on 20,800 acres would reduce the shrub component and increase the grass/forb component in native plant communities and restore a more natural vegetative mosaic of open grassy areas (principally Idaho fescue and bluebunch wheatgrass) intermixed with areas containing various ages of low and big sagebrush species. Areas to be treated are big sagebrush ecological sites on the plateau. The existing amount of big sagebrush on the plateau would decrease significantly compared to low sagebrush. A rapid upward trend in condition would occur since livestock grazing pressure (AUMs) would not be increased as the native species are reestablished and regain dominance. Over time, and with continued livestock grazing, it is projected that the plant community would return to what presently exists on the proposed burn sites, mainly sagebrush. The time interval needed between rehabilitation efforts to retain a desired mosaic would be 20 to 30 years.

Improved grazing systems would allow an increase in the abundance and vigor of grasses and forbs by controlling the season of use for livestock. Since livestock use would remain at approximately the same levels occurring at the time of designation and more forage would be available, grazing pressure would be reduced and overall livestock utilization of native plant communities would decrease in the long term. The increased abundance and vigor of grass and forb species would also reduce the susceptibility of areas to sagebrush encroachment. The ecological condition of native plant communities would generally improve with improved grazing systems. The current poor or fair ecological conditions on 267,950 acres of native plant communities across the plateau and in small areas of the canyons would improve. Canyon and plateau areas in good ecological condition (approximately 109,610 acres) would remain in stable condition (Table IV-3).

Of the 105.6 miles of vehicle routes closed to motorized recreation, native vegetation on 49.8 miles would partially recover and native perennial grass species would reestablish and dominate the wheel tracks. Native shrub species would not be expected to become established in the wheel tracks because of periodic crushing by maintenance vehicles associated with rangeland project maintenance. The remaining roads/ways (55.8 miles) would not have any vehicle traffic and would fully return to native species including sagebrush. Construction of four new reservoirs would eliminate the vegetation on eight acres (Table II-8).

Nonsuitable Area

Prescribed burning would occur on 50% of the 15,000 acres of big sagebrush sites across the nonsuitable plateau. Following burning on the 7,500 acres, it is projected that about 50% of the burned areas in Idaho would be seeded to non-native species. The grass/forb composition of the vegetation communities would increase and result in a vegetative mosaic of open grassy areas intermixed with areas containing various ages of low and big sagebrush. Because about 50% of the big sagebrush sites across the plateau would be burned and 50% of the burned areas would be seeded, seedings of non-native species would displace about 25% of the 15,000 acres of big sagebrush sites across the plateau. Therefore, about 3,750 acres of big sagebrush on the plateau would be displaced by non-native grass species, mostly on the Idaho WSA lands south of the Owyhee River and East Fork Owyhee River.

On untreated areas (both big and low sagebrush ecological sites) across the nonsuitable plateau, improved livestock grazing systems would redistribute livestock use and increase the abundance and vigor of native grasses (principally Idaho fescue and bluebunch wheatgrass) and forbs. The increased amount of native grasses and forbs, together with the increased non-native grasses following burning and seeding, would be available for livestock forage. Utilization levels of up to 50% (by weight) would be allowed and livestock use would increase 5%. The abundance and vigor of native grasses and forbs would increase similar to that described for the suitable area, but to a lesser degree because of increased livestock use in the nonsuitable area. Increases in the number of livestock using nonsuitable lands could result in slightly higher susceptibility to sagebrush

encroachment than suitable areas where forage use is not increased. Within the nonsuitable areas, the current poor or fair ecological conditions of native plant communities on the plateau (about 57,507 acres) would improve. Plateau areas with crested wheatgrass or Siberia wheatgrass seedings would show an encroachment of sagebrush. Canyon and plateau areas in good ecological condition (approximately 9,525 acres) would remain in stable condition.

Construction of six new reservoirs in the nonsuitable area would result in the loss of twelve acres of native vegetation.

A new pipeline in the El Paso corridor would disturb a 25 foot wide strip about 8 miles long within WSAs ID-16-49D, ID-111-49E and NV-010-103A. The pipeline strip would be mechanically altered with half the acreage (eastern half) rehabilitated and returned to native species in a three to five year period with sagebrush canopy cover returning within 20 years. A regularly maintained dirt road would be constructed along the west side of the pipeline. The maintenance of the new pipeline road is expected to permanently remove 12 acres of native vegetation. Regular maintenance and inspection actions are expected to keep the roadway clear of vegetation.

Development of the Twelve Mile Corridor in WSA NV-010-106 projects two paralleling high voltage powerlines constructed approximately one mile apart. At least 27 towers would be constructed within the WSA complex. Approximately 15 acres of native vegetation would be disturbed or removed during construction of the towers. Vegetation would be permanently lost on 1 1/2 acres. Full vegetative recovery on 13 1/2 disturbed acres would occur in 20 years. No new roads would be built, but each powerline would have a vehicle way developed to facilitate line inspection and maintenance. Vegetation disturbance on these ways would be substantial during the construction period. Within five to ten years after powerline construction, native vegetation would reclaim these ways except in the wheel tracks where shrubs would not become reestablished.

Oil and gas exploration actions would have only short-term impacts on native vegetation. Seismic testing with specialized vehicles would impact or "thump" the ground to obtain seismic readings. These vehicles would travel cross-country when necessary in a three to five mile wide grid pattern. Wheel tracks would remain behind, but vegetation would recover within three to five years depending on climatic conditions. Exploratory drillings would disturb a total of 30 acres of native vegetation at three sites in WSAs OR-3-195, ID-16-48C and ID-16-49A. The sites would remain disturbed for a period of nine months to one year. Following the completion of exploration activities, topsoil at the sites would be replaced and the disturbed areas seeded to native vegetation. Within five years all three sites would be rehabilitated with native vegetation, including the ways, with a mixture of grasses and shrubs. Complete restoration of the sagebrush canopy would take from ten to 20 years.

Conclusion

In the suitable area, prescribed burning, maintenance of present livestock levels, and improved grazing systems would cause good condition native vegetation (109,610 acres) to remain stable and 267,950 acres of poor/fair condition native vegetation to improve. Native vegetation would partially recover along 49.8 miles and fully recover along 55.8 miles of roads/ways closed to motorized recreation use. Ten acres of vegetation would be lost at boating launch sites and along the upper South Fork Owyhee River and middle section of the Owyhee River due to increased recreation use. Two acres of vegetation would be lost through the "45" Dam maintenance. Loss of eight acres of vegetation would occur from construction of four reservoirs.

In the nonsuitable areas, poor/fair condition native vegetation (57,507 acres) would improve and good condition native vegetation (9,525 acres) would remain stable. Prescribed burning would occur on 7,500 acres of which 3,750 acres would be displaced by non-native species. Native vegetation would be permanently lost on approximately 12 acres of the total 25 acres disturbed by the establishment of a new pipeline/maintenance road within the El Paso corridor. Within the Twelve Mile corridor, 1 1/2 acres of native vegetation would be permanently lost and 13 1/2 disturbed acres would recover in 20 years. Oil and gas exploration would displace a total of 30 acres, but rehabilitation of the disturbed sites would occur in five to 20 years. Loss of 12 acres of vegetation would occur from construction of six reservoirs.

TABLE IV-3

IMPACTS TO ECOLOGICAL CONDITION OF NATIVE VEGETATION
FROM THE PROPOSED ACTION (BLM ACRES)

	Suitable Area		Nonsuitable Area		
	Ecological Condition		Ecological Condition		
WSA	Good Condition Retained[1]	Poor/Fair Condition Improved[2]	Good Condition Retained	Poor/Fair Condition Improved	Native Vegetation Displaced
OR-3-195	57,500	94,540	4,250	33,460	950
ID-16-48B	12,850	20,850	0	0	0
ID-16-48C	2,290	6,170	4,075	9,890	2,175
ID-16-49A	10,035	57,495	0	3,700	550
ID-16-49D	2,390	7,160	0	365	75
ID-111-49E	2,375	29,505	0	80	0
ID-16-52	4,270	8,680	0	200	0
ID-16-53	14,600	28,145	0	0	0
NV-010-103A	1,700	3,480	0	2,662	0
NV-010-106	1,600	11,925	1,200	7,150	0
TOTALS	109,610	267,950	9,525	57,507	3,750

[1] Includes 40 non-WSA acres.
[2] Includes 2,235 non-WSA acres.

IMPACTS TO THE LEVEL OF SELECTED WILDLIFE POPULATIONS

Suitable Area

Acquisition of 14,380 acres of non-federal lands would enhance management and protection of mule deer, pronghorn, sage grouse and redband trout by preventing potential conflicting uses which could adversely impact these wildlife populations or their habitats.

Closure of 105.6 miles of roads and ways would reduce motorized recreation use and hunting pressure on mule deer, pronghorn and sage grouse. The road closures would also reduce human disturbance associated with motorized vehicles and stress on the animals would be reduced. Since public access would be restricted to only a few routes, disturbance and hunting pressure would primarily occur in these few areas. Mule deer in particular would be disturbed less from closure of access routes which lead to the canyon rim or river. The closed vehicle routes would partially or fully revegetate but overall wildlife habitat would not be measurably affected. Although disturbance and hunting pressure would be reduced, wildlife populations are not projected to change over the long term because of road closures.

Burning 20,800 acres would benefit mule deer, pronghorn and sage grouse. The burns would open up dense sagebrush stands and allow native grasses and forbs to increase. Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox and other forbs would increase. The edge affect created by the fire would also provide escape, loafing and nesting cover (Wright and Bailey 1982). The improved range condition on the plateau would increase wildlife forage availability and improve overall habitat conditions (forage/cover ratio) for pronghorn, mule deer and sage grouse. Sage grouse habitat and populations would also improve from this increase in forage and opening of dense sagebrush stands, particularly during the spring and summer months. The increase of forbs and grasses would increase the food available to sage grouse broods (Blaisdell 1953). As a result of the burning and opening up of dense sagebrush stands, an estimated increase of 15-25% in mule deer and pronghorn numbers is projected. Sage grouse populations would increase by an estimated 10-15%.

Construction of four new reservoirs and three miles of fence would affect mule deer and pronghorn. The new reservoirs and fences would allow for improved grazing systems which would redistribute livestock. This would allow for more even utilization of forage by livestock on the plateaus which would improve the ecological condition of plant communities and increase forage availability for wildlife. Reservoirs would contain water in their impoundments which would be available to wildlife well after natural water sources dry up during the late summer months. This would reduce stress on the animals by reducing their traveling distance to alternate water sources. The new reservoirs would also allow wildlife to inhabit previously underutilized areas during this time. New fences would have a minimal impact on wildlife movement since new fences would be constructed to allow for wildlife passage.

Nonsuitable Area

Acquisition of 12,360 acres of non-federal Idaho state lands would enhance management and protection of mule deer, pronghorn, redband trout and sage grouse by preventing potential conflicting uses which could adversely impact these wildlife populations and their habitats. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would prevent potential development of intensively managed recreation facilities, such as commercial lodges or resorts, which could adversely impact mule deer, pronghorn, sage grouse and redband trout populations and habitats as a result of development and increased human traffic. Although management opportunities would be generally enhanced through acquisition, no specific wildlife habitat improvement projects are proposed and wildlife habitat is not projected to change substantially. Therefore, wildlife populations are not projected to increase solely because of acquisition.

Land treatment projects on 7,500 acres would improve forage and cover for mule deer, pronghorn and sage grouse populations as in the suitable areas. However, the increase in livestock use (1,279 AUMs) would lead to increased competition with wildlife for the additional forage created by burning and seeding. Construction of new rangeland facilities (six reservoirs and six miles of fence) would have the same impact to wildlife populations as described in the suitable area. However, the increase in livestock numbers in the nonsuitable lands would lead to competition with wildlife for the benefits derived from these projects. As a result of the improved habitat on 7,500 acres and a slight increase in competition from increased livestock use, mule deer and pronghorn populations are projected to increase by 5% in the nonsuitable area as a result of rangeland management actions. Sage grouse populations would remain stable or decrease up to 10% in the nonsuitable area.

Construction of a pipeline in the El Paso corridor and a powerline in the Twelve Mile corridor would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse. Since habitat changes would be minimal, population levels would not be affected. Pipeline and powerline construction would each last 1 1/2 months.

Oil and gas exploration activities on nonsuitable plateau lands would effect mule deer, pronghorn and sage grouse. Stipulations on oil and gas leases would minimize impacts by prohibiting activity during the times when mule deer, pronghorn and sage grouse populations are most sensitive to human activity. These times correspond to mule deer use on winter range, pronghorn use on winter and fawning ranges and sage grouse use on winter range, breeding grounds and nesting/brood rearing areas. The ten acre disturbed area associated with each of three exploration sites would be temporarily avoided by mule deer, pronghorn and sage grouse using the area. It would take between three to five years for the site to return to native vegetation cover and for wildlife populations to fully reinhabit the disturbed sites. This temporary and relatively small reduction of habitat would not affect population levels. Overall, wildlife population levels would not be impacted by oil and gas exploration activities.

Conclusion

Land acquisition would benefit mule deer, pronghorn, sage grouse and redband trout by eliminating potential resource conflicts. Road and way closures would reduce disturbance to wildlife populations, especially along the canyon rims. Rangeland management actions on suitable lands would increase mule deer and pronghorn populations by 15-25% and sage grouse populations by 10-15%.

Land acquisition of nonsuitable lands would benefit wildlife by eliminating potential resource conflicts. Mule deer and pronghorn populations would increase 5% and sage grouse populations would remain stable or decrease up to 10% as a result of rangeland management actions. Utility corridor actions and oil and gas exploration on nonsuitable lands would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse inhabiting the impact area.

IMPACTS TO THE LEVEL OF SEMI-PRIMITIVE RECREATION

Suitable Area

Of the 14,380 acres of non-federal lands recommended for acquisition, 880 acres are private lands presently accessed by motor vehicles for semi-primitive recreation activities (principally vehicle camping, hunting, sightseeing and some fishing). Only the road to 160 acres of these private lands at Crutcher's Crossing (a boating launch site) between WSAs ID-16-48B and ID-16-49A would be maintained. The other lands have roads which would be closed to motorized recreation use, specifically the roads into Five Bar (WSA OR-3-195), Battle Creek confluence (WSAs ID-16-49A/ID-111-49E/ID-16-49D), and Coyote Hole (WSA ID-16-53).

There are a total of 13 miles of boundary roads separating the Owyhee Canyonlands WSAs. Within the WSAs are 38.4 miles of cherrystem roads and 114.3 miles of ways (two-wheel tracks). A wilderness designation would result in the closure of 105.6 miles (69%) of the roads and ways currently used for semi-primitive motorized recreation use which lead to the interior plateau, the canyons or isolated locations along the canyon rimrocks (Table II-3 and IV-4). Recreation users dependent upon motor vehicle transportation would lose opportunities for semi-primitive activities.

Some motorized hunting activities would be displaced to adjacent areas because of road closures. Many big game hunters are projected to continue to pursue mule deer, pronghorn antelope, and bighorn sheep in the area, even if vehicle use is restricted. The big game road hunters would change to hunting on foot or horseback. Bird hunters would not tend to switch to foot or horseback. Chukker hunting within the canyons would be reduced because of access restrictions to rimrock areas. The road and way closures would also eliminate sage grouse hunting on interior plateau areas. Overall, motorized hunting opportunities within the suitable area would be reduced substantially. However, there are many areas around the WSAs as well as the entire high plateau country of Oregon, Idaho and Nevada where motorized

hunting activities associated with plateau areas are of equal or greater quality. Therefore, road closures would slightly reduce motorized hunting opportunities in the three-state area as a whole.

TABLE IV-4

AMOUNT (PERCENTAGE) OF EXISTING ROADS/WAYS MILEAGE WITHIN EACH WSA WHERE SEMI-PRIMITIVE MOTORIZED RECREATION OPPORTUNITIES WOULD BE LOST[1]

WSA	ALTERNATIVES					Total Mileage-Roads/Ways
	Proposed Action	No Action (No Wilderness)[2]	Canyonlands Wilderness	Wildlife Wilderness	All Wilderness	
OR-3-195						
ID-16-48B	60%	0	4%	39%	100%	102.8 miles
ID-16-48C	----	---	---	----	----	0
ID-16-49A	89%	0	8%	72%	100%	20.0 miles
ID-16-49D	100%	0	0	100%	100%	2.3 miles
ID-111-49E	100%	0	0	100%	100%	2.3 miles
ID-16-52	100%	0	0	0	100%	0.5 miles
ID-16-53						
NV-010-103A	95%	0	0	79%	100%	20.8 miles
NV-010-106	25%	0	0	0	100%	4.0 miles
TOTAL	69%	0	4%	50%	100%	152.7 miles

[1] Mileage by WSA found in Table II-3 (Chapter II, Proposed Action).
[2] Alternative and Subalternative.

Rock hounds are highly dependent upon road access to sources of gem stones in the canyons. Eliminating many of the vehicle routes to rimrock areas would greatly restrict collection opportunities, however, opportunities exist elsewhere in the three-state area.

Some people use the Owyhee Canyonlands area primarily for motorized sightseeing and vehicle camping. Some of the scenic overlooks and vehicle camping sites located at or near the end of cherrystem roads and ways would not be accessible to sightseers and campers by motorized vehicles because of road closures. However, vehicle routes into the canyons between the WSAs would remain open and continue to permit scenic views of the canyons and allow vehicle camping within the canyons. The established scenic overlook site along the northern neck of Oregon WSA OR-3-195 would remain open for vehicle access. A number of undeveloped canyon rimrock overlook and camping sites in Oregon, Idaho and Nevada would remain accessible because existing WSA boundary roads reach to the canyon rims or within several hundred feet of the rims. Though some sites would be closed to motor vehicle access,

sufficient sites would remain accessible to satisfy projected demand. Overall, semi-primitive motorized sightseeing and camping opportunities would be slightly reduced.

Closure of the suitable area to motor vehicle use would not have a notable impact upon recreationists who drive motor vehicles off of roads and ways. Off-road vehicle (ORV) opportunities in the WSAs are minimal because of natural terrain or surface structure limitations. Little ORV use currently exists except when necessary for hunting because of the ample availability of areas closer to population centers.

The Proposed Action calls for maintaining the major road access to the boating launch sites between the WSAs as well as providing some minimal facilities (toilets) at the sites. Semi-primitive motorized recreation use associated with these access roads would continue. The roads would provide opportunities for recreation users to reach the river canyons for hunting as well as allow some opportunity for sightseeing, rock hounding and vehicle camping.

Nonsuitable Area

Acquisition of non-federal lands would have no impact on the level of semi-primitive recreation use on nonsuitable lands other than a slight increase in semi-primitive motorized recreation opportunities resulting from acquisition of a recreation easement at Twelve Mile in WSA NV-010-106. This easement would allow for public access into the Twelve Mile boating launch site on private property.

Upgrading the access road into the boating launch site at Twelve Mile in WSA NV-010-106 and constructing toilets and kiosks at the site would increase motorized recreation opportunities by making the site easier to drive to and a more desirable destination.

Development of the Twelve Mile corridor would result in the establishment of vehicle tracks along two powerlines leading from the east and west boundaries of WSA NV-010-106 to the canyon rimrocks of the South Fork Owyhee River. These routes would provide hunters, rock hounds and sightseers with new recreation opportunities. Development of the El Paso corridor would result in a new pipeline and accompanying maintenance road in WSAs ID-16-49D, ID-111-49E and NV-010-103A. However, this new road would be only 50 feet from the existing road along the El Paso Gas Pipeline and, therefore, would not increase recreation use or opportunities.

Oil and gas exploration activities would generate a number of miles of temporary two-track vehicle access routes in WSA OR-3-195, ID-16-48C and ID-16-49A which would be fully rehabilitated following exploration and not open to motorized recreation use.

Conclusion

Wilderness designation would result in the closure of 105.6 miles of vehicle routes on suitable lands. Non-federal land acquisition associated

with suitable WSA lands would also result in some additional road closures between and within WSAs. These closures would reduce semi-primitive motorized recreation opportunities on the plateau and in some canyon areas. Maintenance of existing river access roads to boating launch sites between the WSAs would ensure continued use of these canyon areas.

The addition of the Twelve Mile access road and river launch site on private lands in WSA NV-010-106 would slightly improve semi-primitive motorized recreation opportunities. Utility corridor development in Nevada WSA NV-010-106 would slightly increase semi-primitive motorized recreation opportunities.

Within 20 years, hunting is projected to reach 2,400 user days annually while use for other activities (sightseeing, rock hounding and vehicle camping) is projected to reach only 235 user days (Table IV-2).

IMPACTS TO THE LEVEL OF LIVESTOCK USE

Land acquisitions are independent of wilderness recommendations and do not vary among alternatives. Livestock use on these lands would continue under the Proposed Action and all alternatives. Development and implementation of allotment management plans (AMPs) and grazing decisions/agreements on 24 allotments would occur under the Proposed Action and all alternatives.

Suitable Area

Maintenance of existing rangeland facilities would continue. Motorized vehicle use on 105.6 miles of roads and ways closed to motorized recreation would be controlled to allow for facility maintenance and construction. Bulldozers would be used for reservoir maintenance and construction. Motorized vehicles would be used for fence maintenance once each year at the beginning of the grazing season. Salting, livestock monitoring and allotment supervision would be conducted by horseback. Four new reservoirs and three miles of fence would be constructed (Table II-8). Livestock grazing would continue at approximately predesignation levels and there would be no increased livestock use within the suitable area.

Nonsuitable Area

Full use of motorized vehicles would be allowed for general livestock management and to maintain and construct rangeland facilities. Six reservoirs and six miles of fence would be constructed. Estimated livestock use within affected allotments would increase by 37,016 AUMs (230,319 AUMs to 267,335 AUMs) in 20 years. This would be a 16% increase over the current active preference for all allotments (Table IV-5). Estimated livestock use within the WSA boundaries would increase by 1,279 AUMs in 20 years (5% increase) and would occur only in nonsuitable areas (Table IV-6).

TABLE IV-5

CURRENT AND ESTIMATED 20-YEAR LIVESTOCK USE
WITHIN AFFECTED ALLOTMENTS (AUMs)

Allotment Name and Number	Current Active Preference	Livestock Use (1982) Licensed Active Use	Alternatives				
			Proposed Action	No Action/ No Wilderness[1]	Canyonlands Wilderness	Wildlife Wilderness	All Wilderness
OREGON							
Arock 1001	10,467	13,949	13,280	14,105	14,105	13,280	13,280
Willow Creek 1004	10,521	10,709	11,970	11,970	12,020	12,020	11,970
Raburn 1005	1,040	1,040	1,040	1,255	1,255	1,255	1,040
Whitehorse 1008	4,478	4,425	4,480	4,480	4,480	4,480	4,480
Jackies Butte 1101	14,334	14,742	14,740	21,610	21,610	14,740	14,740
Ambrose Maher 1102	580	580	580	580	580	580	580
Campbell 1306	14,514	13,032	33,110	35,065	35,065	34,440	33,110
Louse Canyon Comm. 1307	11,533	11,512	11,535	15,115	14,720	11,535	11,535
Anderson 1401	2,964	4,227	2,965	6,565	6,565	2,965	2,965
Star Valley Comm. 1402	6,901	5,285	7,315	7,715	7,715	7,315	7,315
IDAHO							
Garat Individual 0524	80	80	175	175	175	175	175
Bull Basin 0540	3,726	3,203	4,470	4,470	4,470	4,470	4,470
Garat 0584	33,305	15,679	22,775	25,725	25,725	23,025	22,775
Crutchers Crossing 0593	138	140	140	385	225	160	140
"45" 0629	2,152	2,159	2,590	6,160	6,160	2,835	2,280
Castlehead-Lambert 0634	3,123	3,061	4,505	5,285	5,285	4,530	4,505
Nickel Creek 0657	4,891	3,531	9,275	9,275	9,275	9,275	9,275
Tent Creek 0661	1,780	1,780	4,475	5,800	5,800	4,475	1,970
Big Springs 0803	17,851	16,103	17,865	19,765	19,765	17,915	17,865
Riddle 0805	27,199	25,343	24,755	25,670	25,670	24,755	24,755
Northwest 0808	13,400	12,103	19,905	19,905	19,905	19,905	19,905
NEVADA							
Petan-Owyhee 1019	2,094	2,091	2,191	2,191	2,191	1,047	1,047
Owyhee 1024	30,225	12,448	37,428	37,428	37,428	15,112	15,112
YP 1037	13,023	11,840	15,771	15,771	15,771	6,512	6,512
TOTAL	230,319	189,062	267,335	296,465	295,960	236,801	231,801

[1] For both the Alternative and Subalternative.

TABLE IV-6

ESTIMATED CURRENT AND 20-YEAR LIVESTOCK USE WITHIN WSA BOUNDARIES

WSA	Current Use	Proposed Action	No Action		Canyon-lands	Wildlife	All Wilder-ness
			Alter-native	Sub-alter-native			
OREGON[1]							
3-195	11,285	11,385	20,785	20,785	18,285	11,385	11,235
IDAHO							
16-48B	1,280	1,280	1,750	1,750	1,670	1,280	1,280
16-48C	1,255	1,910	2,100	2,100	2,100	1,910	1,255
16-49A	5,320	5,445	6,880	6,880	6,800	5,595	5,320
16-49D	830	830	970	970	970	830	830
111-49E	2,720	2,720	3,250	3,250	3,250	2,770	2,720
16-52	1,635	1,635	1,935	1,935	1,935	1,785	1,635
16-53	1,220	1,220	2,295	2,295	2,295	1,665	1,220
NEVADA							
010-103A	960	1,008	1,008	1,008	1,008	446	446
010-106	2,515	2,866	2,866	2,866	2,866	1,207	1,207
TOTAL	29,020	30,299	43,839	43,839	41,179	28,873	27,148

[1] There is currently a large number of AUMs that are available for livestock use in Oregon allotments.

Conclusion

Motorized use would be restricted on 105.6 miles of roads and ways in suitable areas. Livestock use within the affected allotments would increase 37,016 AUMs (16%). Livestock use within the WSA boundaries would increase 1,279 AUMs (5%). No increased livestock use would occur in suitable areas. Four reservoirs and three miles of fence would be constructed in the suitable area, and six reservoirs and six miles of fence would be constructed in the nonsuitable area.

IMPACTS ON THE LEVEL OF SOIL EROSION

Suitable Area

Road and way closures (Table II-3) would affect the soil resource. It is estimated that the current soil loss from these sources is over 400 tons/year. Since these areas would be closed to motorized recreation and no longer subject to mechanical disturbance (except for occasional use for maintaining rangeland facilities), they would revegetate and soil loss would decrease to about 180 tons/year.

Rangeland burning with or without seeding is projected for 20,800 acres. The 2,080 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

Nonsuitable Area

Rangeland burning with or without seeding is projected for 7,500 acres. The 750 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

Improved grazing systems (including the proposed range improvement projects) would improve range condition which would slightly reduce soil erosion. This slight reduction in soil erosion combined with the projected 5% increase in livestock use over a 20 year period, which would tend to slightly increase soil erosion through reduction of vegetative cover and additional trampling, would have no measurable affect on the soil resource.

Pipeline construction would cause short-term (one to two years) impacts consisting of compaction, mixing of soil layers, and loss of vegetative cover. The maintenance road to be constructed in association with the El Paso corridor would produce about 17.5 tons/year of soil loss.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 3B through 3D). Soil compaction and loss of vegetative cover would result from these operations. A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic to vegetation and act as a soil sterilant. Areas affected would be small (less than ten acres per site) and would rehabilitate in three to five years.

Conclusion

In the suitable area, broad based erosion rates would decrease about 10% (0.2 tons/acre/year) under the current rate of 2.0 tons/acre/year.

Broad based erosion rates would not change in the nonsuitable area.

IMPACTS TO WATER QUALITY

Suitable Area

Road and way closures (See Table II-3) would maintain or improve water quality since these areas would revegetate and decrease possible sediment delivery to streams from these sources.

Rangeland improvement projects along with improved grazing systems would improve the range condition and decrease broad based soil erosion. This would decrease the amount of sediment delivery to waterways by up to 5%.

Nonsuitable Area

Oil and gas exploratory drilling is projected to occur at three locations (Maps 3B through 3D). A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic and in the remote event that these substances accidently enter waterways, water quality would be adversely affected.

Conclusion

Suspended sediment loads would be reduced by up to 5% in suitable areas. There is a remote possibility of toxic materials from oil and gas exploration adversely affecting water quality in nonsuitable areas.

IMPACTS ON LOCAL INCOME AND JOBS

The economic effects (in terms of personal income and employment) of changes in program-related activities under the various alternatives were estimated by use of an input-output model (IMPLAN) developed by the U.S. Forest Service, with which BLM developed the model representing the local economy. As stated in Chapter III, the local economy considered in this EIS included Owyhee County in Idaho, Malheur County in Oregon, and Elko County in Nevada.

An interindustry (or input-output) model is a summary of all the transactions occurring in an area during a one year period that shows, for each industry or economic sector, the amount of its purchases from every other industry (inputs) and the amount of its sales to every other industry (outputs). Purchases of goods to be sold by trade industries are treated as direct sales by the producing industry, and trade industry transactions are

limited to their gross margin accounts or the part of their transactions over and above the cost of goods sold. This information represents the interindustry relationships in the area and permits the estimation of how a change in one industry would affect other industries and the economy as a whole.

When a specific change occurs in the economy, such as an increase in cattle sales due to increased forage availability, the cattle industry purchases more from its suppliers, ranch families spend more, and so on. Recipients of these purchases increase their purchases. The end result of this process is increased activity throughout the economy. The effects of the industry in which the initial change occurs (e.g., the cattle industry) are termed the direct effects of the change. The direct effects plus the effects on other industries in the local economy make up the total local effects. The discussion below reflects the total local effects.

Primary input into a model of this type is the change in final demand (product) resulting from the actions under consideration. The model then converts this data into income and employment per product unit. In this EIS the process generated the following values:

	Personal Income	Employment
Livestock Grazing	$10.01/AUM	.00028109 jobs/AUM
Float Boating	$37.44/RVD	.00166462 jobs/RVD
Big Game Hunting	$30.16/RVD	.00086284 jobs/RVD
Also, Backpacking/Horsepacking, Sightseeing, Rock Hounding		

AUM = Animal Unit Month
RVD = Recreation Visitor Day

Under the Proposed Action, the AUMs available in the affected allotments in 20 years could result in an annual income of $2.7 million. This would be a 43% increase over the present situation (1982 licensed actual use). Recreation use in the WSAs projected in 20 years would result in annual income of $546,000 which is a 298% increase over the present situation.

Employment related to the available AUMs would be 75 jobs in 20 years. There would be 134 jobs in 20 years associated with the projected recreation use. These would be increases of 43% and 152% respectively.

The total income and employment impacts (in 20 years) from this alternative would be $3.2 million and 209 jobs. These would represent 0.9% and 0.7% of the 1981 local personal income and employment respectively. The total increase in income (above existing situation) would be $1.2 million or 0.3% of the 1981 local personal income. The total increase in employment would be 103 jobs or 0.3% of the 1981 employment in the local economy. These increases would be insignificant to the local economy.

Conclusion

The Proposed Action would result in a 0.3% increase in personal income and a 0.3% increase in employment over 20 years in the three-county area.

NO ACTION (NO WILDERNESS) ALTERNATIVE

Under the No Action (No Wilderness) Alternative all of the 446,067 acres of public land in the eight WSAs in Oregon, Idaho and Nevada are recommended nonsuitable for wilderness designation. The BLM administrative designation, Owyhee River Management Area (ORMA), would continue on 297,530 acres within the WSAs. On ORMA lands within the WSAs, 66 miles of the Owyhee River and East Fork Owyhee River in Idaho would be added to the existing 65 miles of congressionally designated Owyhee National Wild River in Oregon. One mile of the East Fork Owyhee River between Idaho WSAs ID-16-49D and ID-16-52 would be included in this National Wild River designation. The ORMA would generally include all of the canyonlands of the WSAs plus plateau lands ranging from about 1/8 mile to one mile or more from the canyon rimrocks.

IMPACTS TO WILDERNESS VALUES

Naturalness

Nonsuitable Area

Land acquisition efforts are projected to transfer 14,200 acres of non-federal lands found in association with the Owyhee River Management Area (ORMA) plus 12,820 acres adjoining the WSAs to federal ownership. Acquisition of these lands would protect existing naturalness by ensuring against potential uses that could reduce naturalness. These lands have the potential for conflicting uses including the development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions, cultivated pastures and exploration for energy and mineral resources. An expansion of the existing Owyhee National Wild River designation would increase the likelihood that interlocked private lands within the river canyons would be developed for recreational purposes because of the increased notoriety of the area.

River recreation use is projected to reach 11,000 user days annually within 20 years, a 500% increase over current use. This use would occur from about 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks during the 92 days within the carrying capacity monitoring period (April 1 through June 30 of each year).

The projected trip starts on the upper Owyhee River system (above Three Forks, Oregon) would result in about 525 campsite uses per year in 20 years, a 350% increase over current use. There are several hundred campsites along the river above Three Forks which is adequate to satisfy this projected demand without overcrowding. Because of the adequate supply of campsites, increased river recreation use is projected to only slightly reduce or change vegetative cover from trampling at the upper river campsites. The trampled vegetation would be a minimal visual impact which would reduce naturalness in the vicinity of the campsites. Therefore, impacts to naturalness at the upper river campsites from increased river recreation use are projected to be minimal.

Campsites along the middle Owyhee River (between Three Forks and Rome, Oregon) are limited (23 campsites) because of the steep slopes and narrow rocky canyon. A total of 194 trips per year, an increase of 325% over current use, would increase trampling of vegetation in these campsite areas. Management under the concept of the Limits of Acceptable Change (General Technical Report INT-176, Stankey 1985), which would include issuing permits and encouraging alternate campsites, would limit trampling of vegetation (changes in natural character) to less than significant. Therefore, increased river recreation use would not significantly impact naturalness of the middle Owyhee River campsites.

Development and use of two boating launch sites would impact the natural landscape on a total of five acres. Facility construction (toilets and kiosks) would result in soil disturbance, however, revegetation of disturbed areas would occur within three years. Increased visitor use would result in the establishment of on site trails and tent pads. Toilets and kiosks would remain over the long term and would be a visual impact which would reduce naturalness in the immediate vicinity. Therefore, development and use of boating launch sites would cause minimal localized impacts to naturalness on a total of five acres.

The "45" Dam on the South Fork Owyhee River would be maintained to provide boater passage and irrigation water to private pasture lands along the South Fork Owyhee River between WSAs ID-16-48B and 16-53. Although not within a WSA, the dam and borrow pit area (two acres used for dam maintenance) are visible from the northernmost canyon area of WSA ID-16-53. Dam maintenance (replacement of dislodged rock material) would not change the appearance of the dam but would prevent revegetation of the borrow pit over the long term. The adverse visual impacts of the dam and borrow pit (vegetation removed or disturbed) would continue to cause localized reductions in naturalness over the long term on about two acres within the South Fork Canyon.

Stabilization of historic stone and wood buildings along the river system (mortaring, applying wood preservative, and re-roofing with timbers and sod) would prevent further deterioration and allow these structures to remain in place. The original design and appearance of the structures would be restored and maintained. The stabilization would not cause any additional impacts to naturalness along the river system.

The 152.7 miles of cherrystem roads and ways remaining open for general public recreation use are projected to receive 4,400 user days of semi-primitive recreation use. This low level of recreation use would not increase vehicle use on the affected roads/ways to a level high enough to change the existing visual appearance of vehicle routes on the landscape. Therefore, impacts to naturalness from increased semi-primitive recreation use are not projected to increase.

The projected 500% increase in annual boating use levels (11,000 user days) combined with the 132% increase in land-based recreation activities (4,400 user days in suitable area) would increase vehicle traffic on the river access roads. Since the access roads would be maintained to existing

standards, this increased vehicle traffic would not change the visual appearance of the access roads nor add to the existing visual impact that these roads have on naturalness. Therefore, there would be no impact on naturalness from increased vehicle traffic on river access roads.

Of the total 4,400 user days projected annually for land-based recreation activities, 1,220 user days are projected for backpacking activities. This primitive recreation use would be dispersed throughout the canyons and adjacent rimrock areas and would have no increased impact on naturalness.

Maintaining and reconstructing existing rangeland management facilities (reservoirs) would impact naturalness. With a 20-year maintenance cycle for reservoirs (stock ponds), five or six reservoirs would be maintained each year using bulldozers. Recontouring dams and dirt piles associated with the reservoirs would reduce the area in which the reservoirs could be seen and would make them appear more like natural features; thereby reducing their impact upon the natural landscape. Localized adverse visual impacts caused by cross-country access by bulldozers to some sites would last from five to ten years and would generally be confined to a small area in any given year. The impacts would consist of crushed sagebrush vegetation running in two parallel lines crossing the plateau landscape which would be visible only if a person is standing on the bulldozer tracks looking up and down their length. They would remain virtually unseen from lands adjacent to the tracks because of screening by sagebrush. Because many of the reservoir sites are accessed by existing roads or ways, cross-country travel impacts from bulldozers would be limited. During the short term, naturalness would be adversely impacted for about five years at each reservoir site that is maintained or reconstructed until vegetation is reestablished. Based upon these findings, maintenance and reconstruction of reservoirs would result in a reduction in the current adverse visual impact of these reservoirs which would enhance naturalness in the vicinity of the reservoirs over the long term.

Maintenance of other rangeland facilities (fences, springs, pipelines) would continue. There would be no change in the appearance of these facilities and periodic vehicle use by livestock permittees for maintenance would continue along existing roads and ways. Therefore, maintenance of other rangeland facilities would not have an increased impact on existing naturalness.

Construction of new rangeland facilities (13 reservoirs and nine miles of fenceline) would affect naturalness on 415 acres (including actual disturbance areas and visual zones, about 25 acres per reservoir and 10 acres per mile of fence). New reservoirs would be constructed to mitigate their localized adverse visual impacts to naturalness (low, rounded/crescent/oval forms) and to generally blend with the environment. The visual impacts from the addition of these new facilities would be minimal since they would only be seen from over a small area and would not result in a notable impact on naturalness in the nonsuitable area as a whole. In total, construction of new rangeland facilities would cause site specific reductions in naturalness on 415 acres (nine reservoirs and nine miles of fence in WSA OR-3-195, three reservoirs in WSA ID-16-48B, and one reservoir in WSA ID-16-48C).

Naturalness on plateau lands, both within and outside of the Owyhee River Management Area (ORMA), would be affected by prescribed burning (29,300 acres; 2,930 acres per year average with reburning every 20 to 30 years) and improved grazing systems. Within the ORMA, 15,600 acres would be burned and allowed to revegetate naturally or be seeded (aerial only) to native species. Outside the ORMA, 13,700 acres would be burned, 50% (6,850 acres) would be drill seeded with non-native species, and 50% would be seeded aerially with native species or allowed to revegetate naturally. Prescribed burning and subsequent revegetation would result in fewer shrubs and an increase in native grasses and forbs. Improved grazing systems would change livestock distribution and reduce grazing pressure. Reduced grazing pressure would allow native grasses and forbs to further increase which would reduce the grazed appearance. However, the increased abundance of grasses on both treated and untreated areas together with the corresponding increase in the number of livestock would maintain rather than reduce the grazed appearance of the landscape. The 6,850 acres treated with drill machinery would suffer a severe loss of naturalness. The drill machinery would establish the seeded vegetation in a linear or striated growth pattern (cultivated appearance) which would contrast with natural growth patterns. Because land treatment within the Idaho WSAs (5,400 acres) would occur intermixed among native vegetation areas, the adverse impact to naturalness would extend over much of the non-ORMA lands (35,090 acres) south of the Owyhee and East Fork Owyhee Rivers. It would be difficult to travel across these portions of plateau without encountering unnatural treated areas. In Oregon WSA OR-3-195, reductions in naturalness would be located in one relatively small area (2,900 acres) in the southeast portion of the WSA. It would be over 20 years before the cultivated appearance would disappear and the apparent naturalness is restored. The rate of restoration would be largely dependent upon the rate of sagebrush regeneration on seeded sites.

In Oregon WSA OR-3-195, forage utilization levels of native vegetation communities on many portions of the plateau are relatively low, running as low as 10% to 20% of available forage. Existing grazing systems would remain in place and projected increased livestock use would consume additional available forage (up to 50% utilization). A 50% utilization of available forage may not affect the ecological condition of native vegetation communities, however, it would result in reduced plant height. Depending upon species, 50% utilization (by weight) can mean the reduction of up to 80% of the plants height. This reduced plant height would increase the grazed appearance of the Oregon plateau and make it appear somewhat less natural.

In Nevada, continuation of grazing systems with similar levels of utilization and no prescribed burning or seeding would not affect existing naturalness.

The El Paso corridor in Nevada would be 3/4 miles wide along the existing El Paso gas pipeline. The buried pipeline has a 25 foot wide right-of-way which was fully disturbed during the laying of the pipe and the subsequent establishment of a maintenance road paralleling the pipe. Construction is projected for an additional buried pipeline 50 feet to the west of the existing pipeline, except at the river crossing where the pipeline would be constructed immediately adjacent to the existing pipeline. The additional

pipeline would have a constructed and maintained road along its west side, except at the river crossings where existing roads would be maintained. The additional pipeline right-of-way is also projected to have a 25 foot wide disturbance resulting in a total soil surface disturbance area within the WSA of about 15 acres.

In WSA NV-010-103A the plateau, and to a much lesser extent the canyonlands, topography slopes sharply downward toward the El Paso pipeline, thereby making the existing disturbance noticeable over 2,662 acres in the WSA's southern periphery. The addition of another 25 foot wide disturbance plus the widening (12 feet more) of the pipeline disturbance across the South Fork Owyhee River Canyon would further reduce naturalness on 2,662 acres.

Development of the El Paso Corridor in WSA NV-101-103A would impact naturalness on about 320 acres of canyon and plateau lands in the northern periphery of adjacent WSA NV-101-106. The existing disturbance from burying the El Paso gas pipeline in the canyon slopes lying between the two WSAs is currently noticeable over these 320 acres. The disturbance from placing an additional pipeline would also be noticeable and would further reduce naturalness in the northern periphery of WSA NV-010-106.

In total, placement of an additional pipeline adjacent to the existing El Paso gas pipeline would moderately reduce naturalness on 2,982 acres in WSAs NV-010-103A and NV-010-106.

The Twelve Mile corridor in Nevada (WSA NV-010-106) would be a five mile wide corridor which would extend from Twelve Mile southward to the WSA's southern boundary at the "YP" Ranch. It is projected that two high voltage powerline systems would traverse southwest-northeastward through the corridor, paralleling each other at a distance of one mile. It is estimated that at least 27 towers would be placed in the WSA at a distance of about 1,300 feet apart. Twenty-seven towers 150 feet high and 90 feet wide would be substantially visible over the entire nonsuitable southern plateau area (7,150 acres) of the WSA. In addition, about 200 acres of canyonlands in the southern portion of the WSA would be visually impacted by towers standing adjacent to the rimrock and by powerlines, with brightly colored warning balls, stretching across the sky above the canyon walls. The visual presence of these powerline systems would substantially reduce naturalness on 7,350 acres of plateau and canyon.

Exploration activities for oil and gas resources are projected to occur on WSA lands recommended nonsuitable for wilderness designation. It is projected that three oil/gas explorational drilling sites would be established in Oregon and Idaho (one each in WSAs OR-3-195, ID-16-48C and ID-16-49A). It is also projected that "thumper" trucks would be used in three to five mile square grids for seismic testing of underlying rock strata. Establishment of each drill site would result in a ten-acre clearing of topsoil and vegetation for the placement of a 150 foot high drilling rig, metal storage sheds, a one-acre mud pond and miscellaneous drilling materials/equipment. Drill sites would be accessed by ways up to 1.3 miles in length. Because of the height of the drill rigs and size of associated buildings, the drill sites would be highly visible over large acreages of the

plateau. In WSA OR-3-195, the drill site would be obvious from at least 3,200 acres in the southeast portion of the WSA; in WSA ID-16-48C, the drill site would be obvious from 5,400 acres in the northwest portion of the WSA; in WSA ID-16-49A, the drill site would be obvious from at least 4,700 acres in the south-central portion of the WSA. Within the three WSAs, naturalness would be reduced on a total of 13,300 nonsuitable acres. All but 1,300 acres (in WSA OR-3-195) of these 13,300 acres would also have a loss of naturalness due to drill seedings. The tall, vertical forms of the drill sites silhouetted against the horizon would contrast sharply with the relatively flat natural terrain on the plateau. The drill sites would be visible from additional nonsuitable acreage, however, adverse impacts on these acreages are expected to be minimal. Once exploratory operations are completed, rehabilitation of the sites and their access ways, including replacement of topsoil and/or seeding grass and shrub vegetation on the drill pads and access ways, would render the drill sites to a substantially natural condition within three to five years. Complete restoration would be expected to occur within 20 years.

Thumper truck grids would produce moderate amounts of sagebrush crushing in paralleling grids every three to four miles across plateau lands. Sagebrush crushing would be noticeable for a period of five years in close proximity to the grid lines, but would not be substantially noticeable on the lands as a whole nor in the long term.

Within WSA OR-3-195, 23 mineral prospecting sites of one acre each are projected on the plateau adjacent to the Owyhee River Canyon and the Louse Canyon-Toppin Canyon complex and in the vicinity of Three Forks in Oregon. Naturalness would be impacted on about 8,800 acres from 19 mineral prospecting sites projected to be located in the Louse Canyon-Toppin Canyon complex and on an additional 1,200 acres associated with two isolated mining prospects below Three Forks and two sites along the Owyhee River Canyon. Geothermal exploration would disturb a total of five acres on two sites near Three Forks, Oregon. Following completion of prospecting activities, soil and vegetation in the rugged rimrock areas affected by most of the prospects is not projected to be readily restored by required rehabilitation work. Steep slopes would not likely permit complete restoration of original slope angles at many of the sites. Heavy metal soil/rock deposits uncovered during prospecting could hinder revegetation of the area. The limited opportunity for complete restoration of prospect sites would cause the naturalness in this area to be reduced for well beyond 20 years. The disturbance and access roads associated with the prospects would be readily seen over a large area. Even though only 28 acres of actual disturbance would occur, a total of about 10,000 acres in the Louse-Toppin-Owyhee River Canyon complex are projected to have naturalness substantially reduced because of the topographic features where the prospects would be located.

Conclusion

In the nonsuitable area, naturalness would be permanently reduced on 415 acres from new reservoir and fence construction. Naturalness would be reduced for over 20 years on 35,090 acres from vegetation treatments (burning and seeding). Some of this acreage (12,000 acres), plus an additional 1,300

acres (13,300 acres total) would have naturalness reduced for up to one year while oil/gas exploration drilling rigs are operating. Naturalness would be permanently reduced on 2,982 acres from pipelines and on 7,350 acres from powerlines. Naturalness would be substantially reduced on 10,000 acres for well beyond 20 years from mineral and geothermal exploration.

TABLE-IV-7
ADVERSE IMPACTS TO NATURALNESS - NO ACTION (NO WILDERNESS) ALTERNATIVE

W S A	SUITABLE AREA					NONSUITABLE AREA					WSA TOTAL				
	VEG. TRT.	UTILITY	MIN.	ENERGY	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL
OR-3-195 (ID-16-48B)	0	0	0	0	0	2,900	0	10,000	1,300 (1,900)	14,200	2,900	0	10,000	1,300 (1,900)	14,200
ID-16-48C	0	0	0	0	0	16,140	0	0	1,900 (3,500)	18,040	16,140	0	0	1,900 (3,500)	18,040
ID-16-49A	0	0	0	0	0	3,440	0	0	1,900 (2,800)	5,340	3,440	0	0	1,900 (2,800)	5,340
ID-16-49D	0	0	0	0	0	200	0	0	0	200	200	0	0	0	200
ID-111-49E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ID-16-52	0	0	0	0	0	1,360	0	0	0	1,360	1,360	0	0	0	1,360
ID-16-53 (NV-010-103A)	0	0	0	0	0	11,050	2,662	0	0	13,712	11,050	2,662	0	0	13,712
NV-010-106	0	0	0	0	0	0	7,670	0	0	7,670	0	7,670	0	0	7,670
TOTALS 1/	0	0	0	0	0	35,090	10,332	10,000	5,100	60,522	35,090	10,332	10,000	5,100	60,522

1/ Acreage does not include areas of small localized impact caused by reservoir or fence construction, "45" dam maintenance, boating launch site development, road/way development or recreation use.

2/ Parentheses () around energy numbers indicate acreages also affected by vegetative treatments. Energy acreages are not included in totals to prevent double counting.

Solitude Opportunities

Nonsuitable Area

Acquisition of 26,740 acres of non-federal lands would ensure that these lands, particularly private lands (1,720 acres) within the river canyons, are not developed or used for activities which could reduce solitude on adjoining WSA lands. Currently all of these lands are used for livestock grazing and occasional recreation. Wild river designation, and its accompanying notoriety, could result in one or more of the private land parcels in the river canyons (all of which are accessed by roads) being developed as a commercially operated, recreation oriented lodge or resort if the lands are not acquired. Such development could substantially reduce solitude opportunities on a localized basis as human activity increases. Since these lands would be acquired and development would be precluded, opportunities for solitude would not be affected.

Other non-federal land acquisition includes a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106. Following easement acquisition, management actions include constructing minimal recreation facilities (toilet and kiosk) and improving road access to make the area a

boating launch site. Acquisition would also prevent potential commercial lodge development which would maintain existing solitude opportunities.

The launch site (road improvement, toilet and kiosk) at Twelve Mile in WSA NV-010-106 would be built on private lands under the authority of a recreation easement. Development of this new launch site would help disperse river recreation use along the upper South Fork Owyhee River in WSA NV-010-106 and ID-16-53(NV-010-103A), and enhance solitude opportunities in this area.

River running recreation use is projected to reach 11,000 user days annually (Table IV-2). This use is expected to occur during an optimum 45-day float period sometime between April 1 and June 30 of each year depending upon climate and river flow conditions. The use would occur from 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks. On an average, this amount of use would equate to one trip starting on the East Fork every two days and on the South Fork about once or twice per day. In a good water year, currently the East Fork gets five trips per year (one launch every nine days); the South Fork gets ten trips (one launch every five days), the main stem Owyhee River gets 35 trips (one launch every one to two days). This change in launch frequency over 20 years would be a 500% to 1000% increase in the potential for recreation user group interaction. Because the rate of travel for each float party would be the same for the East Fork and South Fork, those groups starting from the upper river launch sites (WSA ID-16-49/52 and NV-010-106) would generally not encounter each other while floating on the two forks of the river. Float group interaction would generally begin on the Owyhee River in WSA ID-16-48B below the confluence of the East-South Forks where boating parties merge together. Presently, the merging of float trips on the Owyhee River results in less than one interaction between parties between the confluence and the Three Forks take-out/put-in. In 20 years, the expected group interaction would increase to five or more on this section of river. Below Three Forks in WSA OR-3-195, a launch schedule of four trips per day would raise group interaction rates from a current rate of less than one per day to four or more per day. Such increases in float group interaction would cause a notable loss in opportunities for solitude.

Backpacking use is projected to reach 1,220 user days annually in canyonlands and associated plateau rimrock areas. About 50% of the backpacking use would occur in the spring when river running activities are also occurring. The remainder of the backpacking use would occur during the fall. Presently, little or no interaction between boaters and hikers occurs due to the minimal amount of use and the fact that backpacking primarily occurs in tributary canyons such as Deep Creek, Battle Creek and Louse Canyon. In 20 years, it is projected that backpacking use would remain largely in tributary canyons. Backpacking/boating group interaction in the river canyons should remain at less than one per trip in the East Fork, South Fork and main stem Owyhee River system, therefore, backpacking use would minimally contribute to reductions in solitude opportunities.

When boaters and backpackers travel the river launch site access roads to reach the canyon areas, they will interact with those engaging in other primitive recreation or semi-primitive recreation experiences (mostly sightseeing in the spring, and mostly hunting in the fall). Semi-primitive recreation use is projected to reach 3,180 user days in 20 years. The combined activities of the boaters/sightseers or backpackers/hunters, etc. at the river launch sites would produce almost daily use of these sites and cause a localized reduction in solitude opportunities at these sites. Construction of minimal recreation facilities at two launch sites (toilets and kiosks) would not contribute to increases in recreation use. The facilities would mitigate public health and safety concerns generated by increased recreation use.

Rangeland management actions would have no increased impact on solitude opportunities. The amount of human activity associated with construction and maintenance of fences and reservoirs, vegetative manipulation, and day-to-day grazing system management is not expected to change enough to affect current opportunities for solitude.

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor in WSAs NV-010-103A and NV-010-106. Opportunities for solitude within the corridors would be temporarily (1.5 months) reduced during the construction period on 2,982 acres of the El Paso corridor NV-010-103A and NV-010-106 and on 3,675 acres of the Twelve Mile corridor. Once construction is completed, occasional vehicle use on the two new ways developed along the Twelve Mile corridor powerlines in the southern portion of WSA NV-010-106 would slightly reduce solitude opportunities, principally during fall hunting. Though the El Paso corridor pipeline construction would result in a new road, it would immediately parallel an existing maintenance road. The new road would offer an alternative travel route in a currently traveled area rather than a new route in an untraveled area. Therefore, the new pipeline is not projected to result in increased motor vehicle use or in loss of solitude opportunities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. Human activity at the exploratory drill rig sites would be seen and heard over about 13,300 acres in the three WSAs for a period of nine to twelve months. This exploration activity would reduce solitude opportunities during the period of operation. Following completion of exploration activities, solitude opportunities would return to pre-exploration conditions.

About 10,000 acres of plateau lands in WSA OR-3-195 in the vicinity of the confluence of the Owyhee River and Louse Canyon and in the vicinity of Three Forks would be affected by 23 mining prospects and two geothermal exploration sites and related access ways. Human activity would reduce solitude opportunities in this area during the period that prospecting is active (up to one year). Following completion of prospecting activities, solitude opportunities would return to pre-prospecting conditions.

Conclusion

Notable localized reductions in solitude opportunities are projected in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to increased float group interactions. Localized reduction in solitude opportunities are projected at the boating launch sites where vehicle access along maintained roads would concentrate recreation use and cause frequent interaction between visitors. Short-term (1.5 month) reductions in solitude opportunities are projected on 2,982 acres in WSAs NV-010-103A and NV-010-106 during pipeline construction along the El Paso corridor. An additional 3,675 acres in WSA NV-010-106 would have solitude opportunities temporarily (1.5 months) reduced during powerline construction in the Twelve Mile corridor. A slight reduction in solitude opportunities would continue in this WSA as semi-primitive motorized recreation use occurs along vehicle routes established during powerline construction. Another 13,300 acres in WSAs OR-3-195, ID-16-48C and ID-16-49A would have solitude opportunities temporarily reduced (nine to twelve months) during oil and gas exploratory drilling activities. About 10,000 acres in WSA OR-3-195 would have reduced solitude opportunities for up to one year during mineral prospecting activities.

Primitive Recreation Opportunities

Outstanding primitive recreation experiences exist only on those lands which contain a high degree of naturalness and offer a high degree of solitude opportunities. Changes in either the degree of naturalness or solitude opportunities change primitive recreation opportunities. In the Owyhee Canyonlands WSA complex, opportunities for primitive recreation experiences would change on the same acreage where changes in naturalness or solitude opportunities occur. Naturalness and solitude opportunity impact areas generally coincide with each other except in the canyon areas where solitude impacts occur from recreation user group interaction.

Nonsuitable Area

Acquisition of 26,740 acres of non-federal lands would enhance opportunities for primitive recreation by ensuring that these lands remain natural in character and are not eventually developed with conflicting uses which could reduce opportunities for solitude.

Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would prevent potential conflicting uses and maintain naturalness and solitude opportunities which would enhance primitive recreation opportunities.

In the canyon areas, a slight localized reduction in primitive recreation opportunities would accompany reductions in solitude opportunities caused by increases in boating group interaction along the Owyhee River in WSA OR-3-195 (ID-16-48B), and by increased interaction between boaters and others who use the maintained roads into the various boating launch sites.

Construction of a boating launch site (improved road access, toilet and kiosk) at Twelve Mile in WSA NV-010-106 under the authority of a recreation easement would facilitate the dispersion of primitive recreation use on the upper South Fork Owyhee River; thereby enhancing primitive recreation opportunities through improved solitude opportunities.

Maintenance of the "45" Dam would allow the existing localized loss of naturalness in the South Fork Owyhee Canyon at the northern edge of WSA ID-16-53 to continue. This loss of naturalness locally reduces existing primitive recreation opportunities because river runners must scout and run or line/portage an unnatural structure which blocks the otherwise free-flowing river system. Therefore, maintenance of the "45" Dam would not impact the existing level of primitive recreation opportunities.

Stabilization of historic sites (stone buildings and wood cabins) along the river would benefit primitive recreation opportunities by ensuring the continued enjoyment of viewing these structures for their cultural value. Though not natural in character, they stand as examples of how civilization has come and gone from the Owyhee Canyonlands and heighten the sense of harsh conditions and challenge associated with traveling and living in the area.

Construction of nine reservoirs and nine miles of fence in WSA OR-3-195, three reservoirs in WSA ID-16-48B and one reservoir in WSA ID-16-48C would cause localized reductions in naturalness on 415 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area. On the nonsuitable plateau, 35,090 acres would have primitive recreation opportunities reduced because of losses in naturalness due to the cultivated appearance associated with mechanical drill seeding in native vegetative communities.

Development of the El Paso and Twelve Mile corridors for buried pipelines or overhead powerlines would reduce primitive recreation opportunities. In WSAs NV-010-103A and NV-010-106, 2,982 acres in the El Paso corridor would have primitive recreation opportunities moderately to severely reduced because of a loss of naturalness caused by the visual presence of another pipeline disturbance. Solitude losses would be temporary (1.5 months) during facility construction. Development of powerlines in the Twelve Mile corridor within WSA NV-010-106 would also moderately to severely reduce primitive recreation opportunities over 7,350 acres because of the loss of naturalness caused by the persistent views of the powerlines coupled with a slight loss in solitude opportunities due to some use of powerline access ways for motorized recreation activities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. This activity would be visible over 13,300 acres of surrounding lands, resulting in a temporary (nine to twelve month) loss of primitive recreation opportunities due to losses in naturalness and solitude opportunities.

The use of "thumper" trucks to do seismic testing on a grid pattern across plateau lands would also cause some reduction in primitive recreation opportunities for a period of five years as the naturalness of native vegetation recovers from vehicle track damage.

A temporary (less than one year) loss of solitude opportunities and a loss of naturalness for more than 20 years would occur over 10,000 acres in WSA OR-3-195 as a result of mineral prospecting and geothermal exploration. This loss of naturalness and solitude opportunities would result in a reduction in primitive recreation opportunities for more than 20 years.

Conclusion

Primitive recreation opportunities would generally be retained as a whole. Some localized reduction in primitive recreation opportunities would occur in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to projected increases in river boating use. Localized reductions in primitive recreation opportunities would also occur at boating launch sites where vehicle access along maintained roads would concentrate recreation use. Permanent reductions in primitive recreation opportunities would occur on 2,982 acres in WSAs NV-010-103A and NV-010-106 from construction of a new pipeline in the El Paso corridor. Another 7,350 acres would have primitive recreation opportunities permanently reduced by powerline construction in the Twelve Mile corridor in WSA NV-010-106. About 35,090 acres of plateau would have primitive recreation opportunities reduced for over 20 years by mechanical drill seeding in native vegetation communities. Construction of 13 new reservoirs and nine miles of fence would locally reduce primitive recreation opportunities on a total of 415 acres. Losses in primitive recreation opportunities would occur for a period of nine to twelve months on a total of 13,300 nonsuitable acres within WSAs OR-3-195, ID-16-48C and ID-16-49A while oil and gas exploration activities are occurring and for over 20 years on 10,000 acres in WSA OR-3-195 from mineral prospecting and geothermal exploration.

Special Features (Bighorn Sheep)

Nonsuitable Area

Acquisition of land along the Owyhee River, Battle Creek and Deep Creek would enhance management and protection of bighorn sheep. Acquisition would ensure that potential resource uses on these lands would not adversely impact bighorn sheep in adjoining suitable areas.

It is projected that in 20 years river boating use would reach 11,000 user days annually (a 500% increase over present levels). Use on the East Fork Owyhee River would increase from an average of one trip every eight days to one trip every two days during the peak boating period. During the same period, the South Fork would increase to nearly two trips every day. At Three Forks, use would increase to four trips a day. These increases in use would be very gradual, and bighorn sheep would be able to adjust to this increased use because the sheep would primarily be at the upper levels of the canyon walls and the boaters would be down on the river. Sheep were found to be curious of boaters along the Colorado River as long as boaters stayed in the boats (Manson and Summer 1980). Human activity at favorite "camp spots" along the river would cause temporary displacement of sheep in the vicinity

of the camp spots while human activity is occurring, but this displacement would be minor and would not effect bighorn sheep populations over the long term.

Recreation user day projections for primitive and semi-primitive recreation activities other than whitewater boating would be about 4,400 user days annually within 20 years. Much of this use, including all 1,220 user days for backpacking/horsepacking and 50% or more of the hunting use (1,450 user days), would occur in association with canyon and plateau areas used by bighorn sheep. These recreation use levels could result in behavioral and/or physiological impacts to bighorn sheep. Studies by the U.S. Forest Service and California Department of Fish and Game (Light 1971, Graham 1971) have shown that human use of desert bighorn sheep habitat in excess of 500 visitor days (a visitor day being one 12 hour visit) can cause bighorn sheep to withdraw from their ranges. Another study of California bighorn sheep habitat in the Sierra Nevada Mountains (Dunaway1971) identified gaps between five bighorn sheep ranges corresponding to areas of high human use. Three of these ranges also suffered losses in population numbers after major increases in recreation use, while the populations in the other two ranges not exposed to surges in recreational use remained stable.

The tolerance of human activity by bighorn sheep can vary dramatically from one population to another. This variation depends upon many factors including the duration, frequency, location, season and nature of the disturbance and past experiences of the population and the individual mature sheep, particularly the herd leader. In the case of the Owyhee Canyonlands WSAs, the timing, location and frequency of recreation use are all of major concern. Over 50% of the projected backpacking/horsepacking use is expected to occur during the cooler, moist spring months during the bighorn lambing period when they are especially sensitive to disturbance. All of the hunting use would occur in the fall months in conjunction with backpacking and horsepacking use. Unlike the projected river boating use, much of the backpacking/horsepacking and hunting use would be located along the canyon rimrocks and in the major tributary canyons at or above the same topographical level where the bighorn sheep population normally resides. This topographic interrelationship between recreation users and bighorn sheep has been observed to cause greater distress than if recreation activities, such as boating, are confined to areas below the bighorns (Manson and Summer 1980). Consequently, projected backpacking/horsepacking and hunting use, combined with boating use, could cause disturbance to bighorn sheep populations. This disturbance would result in displacement of portions of the population into canyon areas to the north of the WSA complex unless the bighorn sheep are able to slowly adjust to human activity as recreation use increases.

Since state wildlife management agencies would continue wildlife population management practices, California bighorn sheep populations are projected to grow and serve as a source for transplants to other areas. Use of helicopters for trapping and transplanting bighorn sheep would continue to support establishment and expansion of the population. Maintenance of existing road networks between and adjacent to the WSAs would allow vehicle access for state game agencies to carry out transplanting programs.

Environmental Consequences

Prescribed burning would be beneficial to bighorn sheep, especially where areas are burned within two miles of the canyon rims. The burns would open up dense sagebrush stands and allow native grasses and forbs (Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox) to increase. This improved range condition on the plateau would increase forage availability and improve overall habitat conditions (forage/cover ratio) for bighorn sheep.

Construction of new reservoirs would improve bighorn habitat and their distribution. Although reservoirs near the canyon would be 1/2 to 1 mile from the canyon rims, they would still improve distribution for bighorn as well as livestock. These reservoirs will allow for more even utilization of the forage by both livestock and bighorns on the plateaus.

Human activity associated with mineral prospecting (23 sites) and geothermal exploration (two sites) in WSA OR-3-195 would cause localized disturbance and short term displacement (up to one year) of bighorn sheep during prospecting and exploration activities but would not affect population numbers.

Based on current population estimates, projected recreation increases, available habitat, new reservoirs and improvements in range conditions, bighorn sheep populations are projected to reach 900-1,200 animals in 20 years, a 300% increase over present levels.

Conclusion

In the nonsuitable area, land acquisition along the Owyhee River, Battle Creek and Deep Creek would ensure that bighorn sheep in adjacent areas are not adversely impacted. Increased recreation use could disturb bighorn sheep populations and cause displacement over the long term. Mineral prospecting and geothermal exploration activities in WSA OR-3-195 would also cause short-term displacement. Within the WSA complex, bighorn sheep populations are projected to expand into available unoccupied habitat. The population projection over the next 20 years is 900 - 1,200 animals.

Special Features (Cultural Values)

Nonsuitable Area

The projected 20 year boating use levels of 11,000 user days annually would mean that prehistoric lithic scatters, multi-functional campsites, rockshelters and rock art sites sites within the river canyons would be visited by parties of up to 15 people on an average of once every two days on the East Fork of the Owyhee River; twice a day on the South Fork; and four times a day below Three Forks during the peak use period of April 1 through June 30. While public education and information efforts would discourage most people from acts of vandalism and theft, the number of such acts would likely increase as visitor use rises over the next 20 years.

Land acquisition actions would have a beneficial impact on cultural resources. Five significant historic site complexes located in the river canyons would be acquired. These sites are important not only for their scientific research potential but for the outstanding recreational/aesthetic values they possess. Acquisition of private lands removes the possibility that sites on those lands would be disturbed or destroyed as a result of commercial recreational development.

Improving the road through private land at Twelve Mile would allow for a moderate localized increase in theft and vandalism of cultural resources in a formerly little-visited area. Acquisition of a 280 acre recreation easement at Twelve Mile would benefit cultural resources by removing the possibility that sites within the easement would be disturbed or destroyed as a result of commercial recreational development. Acquisition of this easement would also allow BLM to reduce deterioration of historic structures at Twelve Mile through stabilization and protection.

Stabilization of 9 historic structures within the river canyons (6 on private lands, 3 on BLM lands), would have a substantial beneficial impact on cultural resources by reducing the current deterioration of significant properties, enhancing the aesthetic qualities of the area for visitors, and preserving scientific information on historic settlement patterns and lifeways for future study.

Livestock use on nonsuitable areas would rise approximately 51% overall and increased damages to cultural resources as a result of increased trampling and related erosion would be significant. This increase in trampling damage would be slightly moderated by implementing grazing systems which would redistribute impacts over a broader area.

Moderately increased localized levels of vandalism and theft of cultural resources would occur as a result of development of new vehicle ways (access roads) associated with the new powerlines in the vicinity of Twelve Mile in Nevada. Slight short-term (nine to twelve months) localized increased vandalism and theft of cultural resources would also occur in the vicinity of the access roads to three oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting and geothermal exploration sites in Oregon.

Vegetative manipulation (burning and plowing and seeding with rangeland drills), installation of range improvements (reservoir and fence construction), construction of recreational facilities (toilets, kiosks and signs) and construction of a pipeline adjacent to the existing El Paso Gas Pipeline are all actions which have potential to disturb or destroy cultural resources which lie within their immediate impact areas. Should a significant site be discovered during any of these actions, potential impacts would be mitigated in advance of project construction after consultation with the State Historic Preservation Officer. Appropriate mitigating measures might include avoidance of a site by relocating or not authorizing a project, modification of a project to eliminate impacts, test or salvage excavation of endangered portions of a site, or merely recording a site. Once mitigation has been determined, project implementation is normally considered to have no impact on cultural resources.

Conclusion

Increases in boating use would lead to increased levels of vandalism and theft in the river canyon areas over time. Acquisition of private lands containing five historic sites, and stabilization and protection of structures at those sites plus three sites on BLM lands would reduce the deterioration of significant resources and enhance the recreational/aesthetic experience for river users. Acquisition of a 280 acre recreation easement at Twelve Mile would allow protection of a significant historic site. Increased livestock use would significantly increase trampling damage. Moderate localized increases in vandalism and theft at cultural sites would occur as a result of road improvement through private land at Twelve Mile in Nevada and as result of new access roads associated with powerline development in Nevada. Slight short-term (nine to twelve months) localized increases in vandalism and theft would occur in the vicinity of the access roads to the oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting and geothermal exploration sites in Oregon.

IMPACTS TO THE CONDITION AND AMOUNT OF NATIVE VEGETATION

Nonsuitable Area

Several sensitive plant sites would come under federal jurisdiction and protection as a result of land acquisition or exchange actions. Hedgehog cactus (Echinocactus simponsi), Inch-High Lupine (Lupine uncialus) and Bailey's Ivesia (Ivesia baileyi) are known to occur on state and private lands that are proposed for acquisition or exchange. There would be no impacts to these species since there are no management actions which would affect these plants.

Development and use of two boating launch sites would impact vegetation in the canyons. Vegetation would be removed during construction of toilets and kiosks at these sites. Increases in recreation use would increase trampling and result in the establishment of trails and tent pads in the vicinity of the sites. Vegetative cover in the vicinity of the two launch sites would be lost over the long term on a total of five acres.

Increased recreation use would affect vegetation along two sections of river canyons; the upper South Fork Owyhee River in WSA NV-010-106 and the middle section of the Owyhee River in WSA OR-3-195. In these river sections, increased boating use combined with limited campsite availability would result in trampling and loss of vegetative cover on a total of five acres at the campsites.

Maintenance of the irrigation dam servicing the "45" Ranch on the South Fork Owyhee River would result in minimal disturbance. The established road would be used to move any needed equipment to the site. A small area of less than two acres has been set aside to provide fill for dam maintenance and vegetation at this site would be lost.

TABLE IV-8

IMPACTS TO ECOLOGICAL CONDITION OF NATIVE VEGETATION
FROM THE NO ACTION (NO WILDERNESS) ALTERNATIVE (BLM ACRES)

WSA	Nonsuitable Area		
	Ecological Condition		
	Good Condition Retained	Poor/Fair Condition Improved	Native Vegetation Displaced
OR-3-195	61,750	127,500	1,450
ID-16-48B	12,850	20,850	0
ID-16-48C	6,365	16,060	2,175
ID-16-49A	10,035	59,550	575
ID-16-49D	2,390	7,525	75
ID-111-49E	2,375	29,165	0
ID-16-52	4,270	8,705	175
ID-16-53	14,560	25,550	2,400
NV-010-103A	1,700	6,142	0
NV-010-106	2,800	19,075	0
TOTALS	119,095	320,122	6,850

Prescribed burning would occur on 29,300 acres of big sagebrush sites across the plateau, about 15,600 acres within the Owyhee River Management Area (ORMA) and about 13,700 acres outside the ORMA. Following burning on the 29,300 acres, it is projected that about 50% of the burned areas outside the ORMA in Idaho would be seeded to non-native species. The grass/forb composition of the vegetation communities would increase and result in a vegetative mosaic of open grassy areas intermixed with areas containing various ages of low and big sagebrush. Therefore, about 6,850 acres of big sagebrush on the plateau would be displaced by non-native grass species, mostly on the Idaho WSA lands south of the Owyhee River and East Fork Owyhee River.

On untreated areas (both big and low sagebrush ecological sites) across the plateau, improved livestock grazing systems would redistribute livestock use and increase the abundance and vigor of native grasses (principally Idaho fescue and bluebunch wheatgrass) and forbs. The increased amount of native grasses and forbs, together with the increased non-native grasses following burning and seeding, would be available for livestock forage. Utilization levels of up to 50% (by weight) would be allowed and livestock use would increase 51%. The abundance and vigor of native grasses and forbs would increase. The current poor or fair ecological conditions of native plant communities on the plateau (about 320,122 acres) would improve. Plateau areas with crested wheatgrass or Siberia wheatgrass seedings would show an

encroachment of sagebrush. Canyon and plateau areas in good ecological condition (approximately 119,095 acres) would remain in stable condition.

Construction of 13 new reservoirs in the nonsuitable area would result in the loss of 26 acres of native vegetation.

A new pipeline in the El Paso corridor would disturb a 25 foot wide strip about 4 1/2 miles long within WSA NV-010-103A. The pipeline strip would be mechanically altered with half the acreage (eastern half) rehabilitated and returned to native species in a three to five year period with sagebrush canopy cover returning within 20 years. A regularly maintained dirt road would be constructed along the west side of the pipeline. The maintenance of the new pipeline road is expected to permanently remove seven acres of native vegetation. Regular maintenance and inspection actions are expected to keep the roadway clear of vegetation.

Development of the Twelve Mile Corridor in WSA NV-010-106 projects two paralleling high voltage powerlines constructed approximately one mile apart. At least 27 towers would be constructed within the WSA complex. Approximately 15 acres of native vegetation would be disturbed or removed during construction of the towers. Vegetation would be permanently lost on 1 1/2 acres. Full vegetative recovery on 13 1/2 disturbed acres would occur in 20 years. No new roads would be built, but each powerline would have a vehicle way developed to facilitate line inspection and maintenance. Vegetation disturbance on these ways would be substantial during the construction period. Within five to ten years after powerline construction, native vegetation would reclaim these ways except in the wheel tracks where shrubs would not become reestablished.

Oil and gas exploration actions would impact native vegetation. Seismic testing with specialized vehicles would impact or "thump" the ground to obtain seismic readings. These vehicles would travel cross-country when necessary in a three to five mile wide grid pattern. Wheel tracks would remain behind, but vegetation would recover within three to five years depending on climatic conditions. Exploratory drillings would disturb a total of 30 acres of native vegetation at three sites in WSAs OR-3-195, ID-16-48C and ID-16-49A. The sites would remain disturbed for a period of nine months to one year. Following the completion of exploration activities, topsoil at the sites would be replaced and the disturbed areas seeded to native vegetation. Within five years all three sites would be rehabilitated with native vegetation, including the ways, with a mixture of grasses and shrubs. Complete restoration of the sagebrush canopy would take from ten to 20 years.

Mineral prospecting would eliminate a total of 23 acres of vegetation on 23 sites and geothermal exploration would eliminate a total of five acres on two sites. The sites would be rehabilitated (recontoured and seeded) following prospecting and exploration. Reestablishment of vegetation would take up to 20 years.

Conclusion

Ten acres of vegetation would be lost at boating launch sites and along the upper South Fork Owyhee River and the middle section of the Owyhee River due to increased recreation use. Two acres of vegetation would be lost through the "45" Dam maintenance. Poor/fair condition native vegetation (320,122 acres) would improve and good condition native vegetation (119,095 acres) would remain stable. Prescribed burning would occur on 29,300 acres of which 6,850 acres would be displaced by non-native species. Native vegetation would be permanently lost on approximately seven acres of the total 14 acres disturbed by the establishment of a new pipeline/maintenance road within the El Paso corridor. Within the Twelve Mile corridor, 1 1/2 acres of native vegetation would be permanently lost and 13 1/2 disturbed acres would recover in 20 years. Oil and gas exploration would displace a total of 30 acres, but rehabilitation of the disturbed sites would occur in five to 20 years. Mineral prospecting would disturb 23 acres and geothermal exploration would disturb five acres with recovery projected within 20 years. Loss of 26 acres of vegetation would occur from construction of 13 reservoirs.

IMPACTS TO THE LEVEL OF SELECTED WILDLIFE POPULATIONS

Nonsuitable Area

Acquisition of 26,740 acres of non-federal lands (and a 280 acre recreation easement) would enhance management and protection of mule deer, pronghorn, redband trout and sage grouse by preventing potential conflicting uses which could adversely impact these wildlife populations and their habitats. Although management opportunities would be generally enhanced through acquisition, no specific wildlife habitat improvement projects are proposed and wildlife habitat is not projected to change substantially. Therefore, wildlife populations are not projected to increase solely because of acquisition.

Increased recreation use along roads and ways in the vicinity of the canyon rims would cause disturbance to mule deer, pronghorn and sage grouse but would not affect population levels.

Land treatment projects on 29,300 acres would improve forage and cover for mule deer, pronghorn and sage grouse populations as in the Proposed Action, suitable area. However, the increase in livestock use (14,819 AUMs) would lead to increased competition with wildlife for the additional forage created by burning and seeding. Construction of new rangeland facilities (13 reservoirs and nine miles of fence) would have the same impact to wildlife populations as described in the Proposed Action, suitable area. However, the increase in livestock numbers would increase competition with wildlife for the benefits derived from these projects. As a result of the improved habitat on 29,300 acres and an increase in competition from increased livestock use, mule deer, pronghorn and sage grouse populations are projected to remain stable or decrease up to 15% from rangeland management actions.

Construction of a pipeline in the El Paso corridor and a powerline in the Twelve Mile corridor would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse. Pipeline and powerline construction would each last 1 1/2 months. Since habitat changes would be minimal, population levels would not be affected.

Oil and gas exploration activities on plateau lands would effect mule deer, pronghorn and sage grouse, the same as in the Proposed Action. Stipulations on oil and gas leases would minimize impacts by prohibiting activity during the times when mule deer, pronghorn and sage grouse populations are most sensitive to human activity. These times correspond to mule deer use on winter range, pronghorn use on winter and fawning ranges and sage grouse use on winter range, breeding grounds and nesting/brood rearing areas. The ten acre disturbed area associated with each of three exploration sites would be temporarily avoided by mule deer, pronghorn and sage grouse using the area. It would take between three to five years for the site to return to native vegetation cover and for wildlife populations to fully reinhabit the disturbed sites. This temporary and relatively small reduction of habitat would not affect population levels. Overall, wildlife population levels would not be impacted by oil and gas exploration activities.

Mineral prospecting at 23 sites in WSA OR-3-195 is projected to deposit fine sediments in the West Little Owyhee River (Louse Canyon). Sedimentation in the Owyhee River due to activities primarily outside the WSA is already adversely impacting fisheries in that river. Depending on the mining method used, it is projected that sedimentation in the West Little Owyhee River would increase by up to 25% due to mineral prospecting at 23 sites. This increase in sedimentation would have significant adverse impacts on the fisheries. Trout "redds" would become unusable because silt deposits would cover gravel and riffle areas used as spawning habitat. Sediment deposits would also reduce water depths, reduce rearing areas and hiding cover, increase water temperatures, and reduce oxygen availability. All of these impacts would adversely impact fish populations and reduce the aquatic invertebrate populations which the fish populations depend on. Given this increase in sedimentation and the lack of flushing flows to remove sediments under low flow conditions, fish populations along 15 miles in the West Little Owyhee River could be reduced by up to 50%. Heavy metal toxics leeched or released directly into the stream could reduce fish and invertebrates outright or could bioaccumulate and reduce fish and invertebrates over time.

Human activity associated with mineral prospecting at 23 sites and geothermal exploration at two sites would cause localized disturbance and displacement of mule deer, pronghorn and sage grouse for up to one year, but would not impact populations. Loss of vegetation at these sites would not impact wildlife populations.

Conclusion

Land acquisition would benefit wildlife by eliminating potential resource conflicts. Increased recreation use along the canyon rims would temporarily disturb wildlife. Utility corridor actions, oil and gas exploration, mineral

prospecting and geothermal exploration would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse inhabiting the impact area. Mineral prospecting in WSA OR-3-195 could cause up to a 50% reduction of fish populations in the West Little Owyhee River. Mule deer, pronghorn, and sage grouse populations would remain stable or decrease up to 15% as a result of rangeland management actions.

IMPACTS TO THE LEVEL OF SEMI-PRIMITIVE RECREATION

Nonsuitable Area

Of the 14,200 acres of non-federal lands recommended for acquisition, 880 acres are private lands presently accessed by motor vehicles for semi-primitive recreation activities (principally vehicle camping, hunting, sightseeing and some fishing). Acquisition of non-federal lands would have no impact on the level of semi-primitive recreation use on nonsuitable lands other than a slight increase in semi-primitive motorized recreation opportunities resulting from acquisition of a recreation easement at Twelve Mile in WSA NV-010-106. This easement would allow for public access into the Twelve Mile boating launch site on private property.

Upgrading the access road into the boating launch site at Twelve Mile in WSA NV-010-106 and constructing toilets and kiosks at the site would increase motorized recreation opportunities by making the site easier to drive to and a more desirable destination.

The No Action (No Wilderness) Alternative would allow motorized recreation use on 152.7 miles of roads and ways within the WSAs including the major road access to the boating launch sites between the WSAs as well as providing some minimal facilities (toilets) at the sites. Semi-primitive motorized recreation use associated with these roads and ways and access roads would continue. The roads would provide opportunities for recreation users to reach the river canyons for hunting as well as allow opportunity for sightseeing, rock hounding and vehicle camping.

Development of the Twelve Mile corridor would result in the establishment of vehicle tracks along two powerlines leading from the east and west boundaries of WSA NV-010-106 to the canyon rimrocks of the South Fork Owyhee River. These routes would provide hunters, rock hounds and sightseers with new recreation opportunities. Development of the El Paso corridor would result in a new pipeline and accompanying maintenance road in WSA NV-010-103A. However, this new road would be only 50 feet from the existing road along the El Paso Gas Pipeline and, therefore, would not increase recreation use or opportunities.

Oil and gas exploration activities would generate a number of miles of temporary two-track vehicle access routes in WSA OR-3-195, ID-16-48C and ID-16-49A which would be fully rehabilitated following exploration and not open to motorized recreation use.

Conclusion

Maintenance of existing river access roads to boating launch sites between the WSAs would ensure continued use of these canyon areas. The addition of the Twelve Mile access road and river launch site on private lands in WSA NV-010-106 would slightly improve semi-primitive motorized recreation opportunities. Utility corridor development in Nevada WSA NV-010-106 would slightly increase semi-primitive motorized recreation opportunities.

Within 20 years, hunting is projected to reach 2,900 user days annually while use for other activities (sightseeing, rock hounding and vehicle camping) is projected to reach only 280 user days (Table IV-2).

IMPACTS TO THE LEVEL OF LIVESTOCK USE

Nonsuitable Area

Full use of motorized vehicles would be allowed for general livestock management and to maintain and construct rangeland facilities. Thirteen reservoirs and nine miles of fence would be constructed. Estimated livestock use within affected allotments would increase by 66,146 AUMs (230,319 AUMs to 296,465 AUMs) in 20 years. This would be a 29% increase over the current active preference for all allotments (Table IV-5). Estimated livestock use within the WSA boundaries would increase by 14,819 AUMs in 20 years (51% increase) (Table IV-6).

Conclusion

Full use of motorized vehicles would be allow for livestock management. Livestock use within the affected allotments would increase 66,146 AUMs (29%). Livestock use within the WSA boundaries would increase 14,819 AUMs (51%). Thirteen reservoirs and nine miles of fence would be constructed.

IMPACTS ON THE LEVEL OF SOIL EROSION

Nonsuitable Area

Rangeland burning with or without seeding is projected for 29,300 acres. The 2,930 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

The projected 51% increase in livestock use over a 20 year period would affect the broad based soil resource through reduction of vegetative cover and additional trampling resulting in increased erosion and compaction. Erosion would show the largest increase around livestock concentration areas and on steep hillsides. The areas most affected would be WSAs NV-010-106, OR-3-195, ID-16-48C, ID-16-48B, ID-111-49E, ID-16-49A and ID-16-53. Improved grazing systems (including the proposed range improvement projects) would improve range condition which would tend to reduce soil erosion. The overall increase in livestock use would increase erosion rates by 10% to 20% (0.2 to 0.4 tons/acre/year) for the entire WSA complex.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 4B through 4D). Soil compaction and loss of vegetative cover would result from these operations. A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic to vegetation and act as a soil sterilant. Areas affected would be small (less than ten acres per site) and would rehabilitate in three to five years.

Impacts from two geothermal exploration exploration sites in WSA OR-3-195 would be the same as for oil and gas exploration except that a total of five acres would be disturbed.

Mineral prospecting is projected in WSA OR-3-195 at 23 sites (Map 4A and 4B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and increase sediment loads into the West Fork Little Owyhee River (Louse Canyon). Toxic substances could be brought to the surface making the soil around the tailings pile sterile and retarding revegetation. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

Broad based erosion rates would increase by about 10% to 20% (0.2 to 0.4 tons/acre/year) over the current rate of 2.0 tons/acre/year.

IMPACTS TO WATER QUALITY

Nonsuitable Area

The projected 51% increase in livestock use would increase broad based soil erosion about 10% to 20% and increase the amount of sediment to waterways by 10% to 20%.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 4B through 4D). A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic and in the remote event that these substances accidently enter waterways, water quality would be adversely affected.

Impacts from geothermal exploration at two sites in WSA OR-3-195 would be the same as for oil and gas exploration.

Mineral prospecting is projected in WSA OR-3-195 at 23 sites (Map 4A and 4B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and increase sediment loads and degrade water quality in the West Fork Little Owyhee River (Louse Canyon). Toxic substances could be brought to the surface and could enter waterways and degrade water quality. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

Suspended sediment loads would be increased 10% to 20%. There is a remote possibility of toxic materials from oil and gas exploration and mineral prospecting adversely affecting water quality.

IMPACTS ON LOCAL INCOME AND JOBS

The AUMs available in the affected allotments in 20 years could result in an annual income of $3.0 million. This would be a 58% increase over the present situation (1982 licensed actual use). Recreation use in the WSAs projected in 20 years would result in annual income of $545,000 which is a 297% increase over the present situation.

Employment related to the available AUMs would be 83 jobs in 20 years. There would be 133 jobs in 20 years associated with the projected recreation use. These would be increases of 58% and 151% respectively.

The total income and employment impacts (in 20 years) from this alternative would be $3.5 million and 216 jobs. These would represent 1.0% and 0.7% of the 1981 local personal income and employment respectively. The total increase in income (above existing situation) would be $1.5 million or 0.4% of the 1981 local personal income. The total increase in employment would be 110 jobs or 0.4% of the 1981 employment in the local economy. These increases would be insignificant to the local economy.

Conclusion

The No Action (No Wilderness) Alternative would result in a 0.4% increase in personal income and a 0.4% increase in employment over 20 years in the three-county area.

NO ACTION (NO WILDERNESS) SUBALTERNATIVE

Under the No Action (No Wilderness) Subalternative all of the 446,067 acres of public land in the eight WSAs in Oregon, Idaho and Nevada are recommended nonsuitable for wilderness designation. The BLM administrative designation, Owyhee River Management Area (ORMA), would continue on 297,530 acres within the WSAs. On ORMA lands within the WSAs, 65 miles of the Owyhee River and East Fork Owyhee River in Idaho would be added to the existing 65 miles of congressionally designated Owyhee National Wild River in Oregon. One mile of the East Fork Owyhee River between Idaho WSAs ID-16-49D and ID-16-52 would not be included in this National Wild River designation. The ORMA would generally include all of the canyonlands of the WSAs plus plateau lands ranging from about 1/8 mile to one mile or more from the canyon rimrocks.

The management actions and environmental impacts for this No Action (No Wilderness) Subalternative would be the same as for the No Action (No Wilderness) Alternative except for additional utility corridor management actions and their associated impacts in WSAs ID-16-49D, ID-111-49E and ID-16-52. These utility corridor management actions and associated environmental impacts would be the same as for the Proposed Action, suitable area and nonsuitable area combined.

IMPACTS TO WILDERNESS VALUES

Naturalness

Nonsuitable Area

Land acquisition efforts are projected to transfer 14,200 acres of non-federal lands found in association with the Owyhee River Management Area (ORMA) plus 12,820 acres adjoining the WSAs to federal ownership. Acquisition of these lands would protect existing naturalness by ensuring against potential uses that could reduce naturalness. These lands have the potential for conflicting uses including the development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions, cultivated pastures and exploration for energy and mineral resources. An expansion of the existing Owyhee National Wild River designation would increase the likelihood that interlocked private lands within the river canyons would be developed for recreational purposes because of the increased notoriety of the area.

River recreation use is projected to reach 11,000 user days annually within 20 years, a 500% increase over current use. This use would occur from about 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks during the 92 days within the carrying capacity monitoring period (April 1 through June 30 of each year).

The projected trip starts on the upper Owyhee River system (above Three Forks, Oregon) would result in about 525 campsite uses per year in 20 years, a 350% increase over current use. There are several hundred campsites along the river above Three Forks which is adequate to satisfy this projected demand without overcrowding. Because of the adequate supply of campsites,

increased river recreation use is projected to only slightly reduce or change vegetative cover from trampling at the upper river campsites. The trampled vegetation would be a minimal visual impact which would reduce naturalness in the vicinity of the campsites. Therefore, impacts to naturalness at the upper river campsites from increased river recreation use are projected to be minimal.

Campsites along the middle Owyhee River (between Three Forks and Rome, Oregon) are limited (23 campsites) because of the steep slopes and narrow rocky canyon. A total of 194 trips per year, an increase of 325% over current use, would increase trampling of vegetation in these campsite areas. Management under the concept of the Limits of Acceptable Change (General Technical Report INT-176, Stankey 1985), which would include issuing permits and encouraging alternate campsites, would limit trampling of vegetation (changes in natural character) to less than significant. Therefore, increased river recreation use would not significantly impact naturalness of the middle Owyhee River campsites.

Development and use of two boating launch sites would impact the natural landscape on a total of five acres. Facility construction (toilets and kiosks) would result in soil disturbance, however, revegetation of disturbed areas would occur within three years. Increased visitor use would result in the establishment of on site trails and tent pads. Toilets and kiosks would remain over the long term and would be a visual impact which would reduce naturalness in the immediate vicinity. Therefore, development and use of boating launch sites would cause minimal localized impacts to naturalness on a total of five acres.

The "45" Dam on the South Fork Owyhee River would be maintained to provide boater passage and irrigation water to private pasture lands along the South Fork Owyhee River between WSAs ID-16-48B and 16-53. Although not within a WSA, the dam and borrow pit area (two acres used for dam maintenance) are visible from the northernmost canyon area of WSA ID-16-53. Dam maintenance (replacement of dislodged rock material) would not change the appearance of the dam but would prevent revegetation of the borrow pit over the long term. The adverse visual impacts of the dam and borrow pit (vegetation removed or disturbed) would continue to cause localized reductions in naturalness over the long term on about two acres within the South Fork Canyon.

Stabilization of historic stone and wood buildings along the river system (mortaring, applying wood preservative, and re-roofing with timbers and sod) would prevent further deterioration and allow these structures to remain in place. The original design and appearance of the structures would be restored and maintained. The stabilization would not cause any additional impacts to naturalness along the river system.

The 152.7 miles of cherrystem roads and ways remaining open for general public recreation use are projected to receive 4,400 user days of semi-primitive recreation use. This low level of recreation use would not increase vehicle use on the affected roads/ways to a level high enough to change the existing visual appearance of vehicle routes on the landscape.

Therefore, impacts to naturalness from increased semi-primitive recreation use are not projected to increase.

The projected 500% increase in annual boating use levels (11,000 user days) combined with the 132% increase in land-based recreation activities (4,400 user days in suitable area) would increase vehicle traffic on the river access roads. Since the access roads would be maintained to existing standards, this increased vehicle traffic would not change the visual appearance of the access roads nor add to the existing visual impact that these roads have on naturalness. Therefore, there would be no impact on naturalness from increased vehicle traffic on river access roads.

Of the total 4,400 user days projected annually for land-based recreation activities, 1,220 user days are projected for backpacking activities. This primitive recreation use would be dispersed throughout the canyons and adjacent rimrock areas and would have no increased impact on naturalness.

Maintaining and reconstructing existing rangeland management facilities (reservoirs) would impact naturalness. With a 20-year maintenance cycle for reservoirs (stock ponds), five or six reservoirs would be maintained each year using bulldozers. Recontouring dams and dirt piles associated with the reservoirs would reduce the area in which the reservoirs could be seen and would make them appear more like natural features; thereby reducing their impact upon the natural landscape. Localized adverse visual impacts caused by cross-country access by bulldozers to some sites would last from five to ten years and would generally be confined to a small area in any given year. The impacts would consist of crushed sagebrush vegetation running in two parallel lines crossing the plateau landscape which would be visible only if a person is standing on the bulldozer tracks looking up and down their length. They would remain virtually unseen from lands adjacent to the tracks because of screening by sagebrush. Because many of the reservoir sites are accessed by existing roads or ways, cross-country travel impacts from bulldozers would be limited. During the short term, naturalness would be adversely impacted for about five years at each reservoir site that is maintained or reconstructed until vegetation is reestablished. Based upon these findings, maintenance and reconstruction of reservoirs would result in a reduction in the current adverse visual impact of these reservoirs which would enhance naturalness in the vicinity of the reservoirs over the long term.

Maintenance of other rangeland facilities (fences, springs, pipelines) would continue. There would be no change in the appearance of these facilities and periodic vehicle use by livestock permittees for maintenance would continue along existing roads and ways. Therefore, maintenance of other rangeland facilities would not have an increased impact on existing naturalness.

Construction of new rangeland facilities (13 reservoirs and nine miles of fenceline) would affect naturalness on 415 acres (including actual disturbance areas and visual zones, about 25 acres per reservoir and 10 acres per mile of fence). New reservoirs would be constructed to mitigate their localized adverse visual impacts to naturalness (low, rounded/crescent/oval

forms) and to generally blend with the environment. The visual impacts from the addition of these new facilities would be minimal since they would only be seen from over a small area and would not result in a notable impact on naturalness in the nonsuitable area as a whole. In total, construction of new rangeland facilities would cause site specific reductions in naturalness on 415 acres (nine reservoirs and nine miles of fence in WSA OR-3-195, three reservoirs in WSA ID-16-48B, and one reservoir in WSA ID-16-48C).

Naturalness on plateau lands, both within and outside of the Owyhee River Management Area (ORMA), would be affected by prescribed burning (29,300 acres; 2,930 acres per year average with reburning every 20 to 30 years) and improved grazing systems. Within the ORMA, 15,600 acres would be burned and allowed to revegetate naturally or be seeded (aerial only) to native species. Outside the ORMA, 13,700 acres would be burned, 50% (6,850 acres) would be drill seeded with non-native species, and 50% would be seeded aerially with native species or allowed to revegetate naturally. Prescribed burning and subsequent revegetation would result in fewer shrubs and an increase in native grasses and forbs. Improved grazing systems would change livestock distribution and reduce grazing pressure. Reduced grazing pressure would allow native grasses and forbs to further increase which would reduce the grazed appearance. However, the increased abundance of grasses on both treated and untreated areas together with the corresponding increase in the number of livestock would maintain rather than reduce the grazed appearance of the landscape. The 6,850 acres treated with drill machinery would suffer a severe loss of naturalness. The drill machinery would establish the seeded vegetation in a linear or striated growth pattern (cultivated appearance) which would contrast with natural growth patterns. Because land treatment within the Idaho WSAs (5,400 acres) would occur intermixed among native vegetation areas, the adverse impact to naturalness would extend over much of the non-ORMA lands (35,090 acres) south of the Owyhee and East Fork Owyhee Rivers. It would be difficult to travel across these portions of plateau without encountering unnatural treated areas. In Oregon WSA OR-3-195, reductions in naturalness would be located in one relatively small area (2,900 acres) in the southeast portion of the WSA. It would be over 20 years before the cultivated appearance would disappear and the apparent naturalness is restored. The rate of restoration would be largely dependent upon the rate of sagebrush regeneration on seeded sites.

In Oregon WSA OR-3-195, forage utilization levels of native vegetation communities on many portions of the plateau are relatively low, running as low as 10% to 20% of available forage. Existing grazing systems would remain in place and projected increased livestock use would consume additional available forage (up to 50% utilization). A 50% utilization of available forage may not affect the ecological condition of native vegetation communities, however, it would result in reduced plant height. Depending upon species, 50% utilization (by weight) can mean the reduction of up to 80% of the plants height. This reduced plant height would increase the grazed appearance of the Oregon plateau and make it appear somewhat less natural.

In Nevada, continuation of grazing systems with similar levels of utilization and no prescribed burning or seeding would not affect existing naturalness.

The El Paso corridor in Idaho and Nevada would be 1/4 mile to 3/4 miles wide along the existing El Paso gas pipeline. This pipeline is buried except where it is suspended across the Garat Gorge on the East Fork Owyhee River. The buried pipeline has a 25 foot wide right-of-way which was fully disturbed during the laying of the pipe and the subsequent establishment of a maintenance road paralleling the pipe. Construction is projected for an additional buried pipeline 50 feet to the west of the existing pipeline, except at the river crossing where the pipeline would be constructed immediately adjacent to the existing pipeline. The additional pipeline would have a constructed and maintained road along its west side, except at the river crossings where existing roads would be maintained. The additional pipeline right-of-way is also projected to have a 25 foot wide disturbance resulting in a total soil surface disturbance area within three WSAs of about 25 acres.

In WSA NV-010-103A the plateau, and to a much lesser extent the canyonlands, topography slopes sharply downward toward the El Paso pipeline, thereby making the existing disturbance noticeable over 2,662 acres in the WSA's southern periphery. The addition of another 25 foot wide disturbance plus the widening (12 feet more) of the pipeline disturbance across the South Fork Owyhee River Canyon would further reduce naturalness on 2,662 acres.

Development of the El Paso Corridor in WSA NV-101-103A would impact naturalness on about 320 acres of canyon and plateau lands in the northern periphery of adjacent WSA NV-101-106. The existing disturbance from burying the El Paso gas pipeline in the canyon slopes lying between the two WSAs is substantially noticeable over the 320 acres. The disturbance from placing an additional pipeline would also be noticeable and would further reduce naturalness in the northern periphery of WSA NV-010-106.

Development of the pipeline in WSA ID-16-49D would impact the naturalness of the canyon and some of the plateau in the northwest periphery of adjacent WSA ID-16-52. The existing pipeline is visible over about 320 acres of the East Fork Owyhee River canyon and adjacent plateau rimrock areas. The additional pipeline would be buried or suspended immediately adjacent to the existing pipeline (25 feet instead of 50 feet) within the canyon, and the existing 25-foot wide disturbance would be widened by about 12 feet. During construction of the additional pipeline, the existing disturbed area would be rehabilitated (recontoured and seeded), and although the total disturbed area would be 12 feet wider, the existing disturbance would be less noticeable following rehabilitation. Suspending another pipe across the river canyon would not noticeably add to the reduced naturalness caused by the existing suspended pipe. Consequently, reductions to naturalness in WSA ID-16-52 are projected to be moderate on 320 acres.

In WSAs ID-16-49D and ID-111-49E, the existing pipeline is generally unnoticeable because the lands slope gently downward away from the pipeline. Only on a small area of about 100 acres on the southeast side and top of Windy Point Butte, in the southeast corner of WSA ID-16-49D, is naturalness reduced by views of the pipeline. Placement of the additional pipeline would further reduce naturalness in the Windy Point area and on about eight additional acres along the remainder of the two WSAs' southeast peripheries.

In total, placement of an additional pipeline adjacent to the existing El Paso gas pipeline would moderately reduce naturalness on 3,410 acres; 2,982 acres in WSAs NV-010-103A and NV-010-106 and 428 acres in WSAs ID-16-49D, ID-111-49E and ID-16-52.

The Twelve Mile corridor in Nevada (WSA NV-010-106) would be a five mile wide corridor which would extend from Twelve Mile southward to the WSA's southern boundary at the "YP" Ranch. It is projected that two high voltage powerline systems would traverse southwest-northeastward through the corridor, paralleling each other at a distance of one mile. It is estimated that at least 27 towers would be placed in the WSA at a distance of about 1,300 feet apart. Twenty-seven towers 150 feet high and 90 feet wide would be substantially visible over the entire nonsuitable southern plateau area (7,150 acres) of the WSA. In addition, about 200 acres of canyonlands in the southern portion of the WSA would be visually impacted by towers standing adjacent to the rimrock and by powerlines, with brightly colored warning balls, stretching across the sky above the canyon walls. The visual presence of these powerline systems would substantially reduce naturalness on 7,350 acres of plateau and canyon.

Exploration activities for oil and gas resources are projected to occur on WSA lands. It is projected that three oil/gas explorational drilling sites would be established in Oregon and Idaho (one each in WSAs OR-3-195, ID-16-48C and ID-16-49A). It is also projected that "thumper" trucks would be used in three to five mile square grids for seismic testing of underlying rock strata. Establishment of each drill site would result in a ten-acre clearing of topsoil and vegetation for the placement of a 150 foot high drilling rig, metal storage sheds, a one-acre mud pond and miscellaneous drilling materials/equipment. Drill sites would be accessed by ways up to 1.3 miles in length. Because of the height of the drill rigs and size of associated buildings, the drill sites would be highly visible over large acreages of the plateau. In WSA OR-3-195, the drill site would be obvious from at least 3,200 acres in the southeast portion of the WSA; in WSA ID-16-48C, the drill site would be obvious from 5,400 acres in the northwest portion of the WSA; in WSA ID-16-49A, the drill site would be obvious from at least 4,700 acres in the south-central portion of the WSA. Within the three WSAs, naturalness would be reduced on a total of 13,300 nonsuitable acres. All but 1,300 acres (in WSA OR-3-195) of these 13,300 acres would also have a loss of naturalness due to drill seedings. The tall, vertical forms of the drill sites silhouetted against the horizon would contrast sharply with the relatively flat natural terrain on the plateau. The drill sites would be visible from additional nonsuitable acreage, however, adverse impacts on these acreages are expected to be minimal. Once exploratory operations are completed, rehabilitation of the sites and their access ways, including replacement of topsoil and/or seeding grass and shrub vegetation on the drill pads and access ways, would render the drill sites to a substantially natural condition within three to five years. Complete restoration would be expected to occur within 20 years.

Thumper truck grids would produce moderate amounts of sagebrush crushing in paralleling grids every three to four miles across plateau lands. Sagebrush crushing would be noticeable for a period of five years in close proximity to the grid lines, but would not be substantially noticeable on the lands as a whole nor in the long term.

Within WSA OR-3-195, 23 mineral prospecting sites of one acre each are projected on the plateau adjacent to the Owyhee River Canyon and the Louse Canyon-Toppin Canyon complex and in the vicinity of Three Forks in Oregon. Naturalness would be impacted on about 8,800 acres from 19 mineral prospecting sites projected to be located in the Louse Canyon-Toppin Canyon complex and on an additional 1,200 acres associated with two isolated mining prospects below Three Forks and two sites along the Owyhee River Canyon. Geothermal exploration would disturb a total of five acres on two sites near Three Forks, Oregon. Following completion of prospecting activities, soil and vegetation in the rugged rimrock areas affected by most of the prospects is not projected to be readily restored by required rehabilitation work. Steep slopes would not likely permit complete restoration of original slope angles at many of the sites. Heavy metal soil/rock deposits uncovered during prospecting could hinder revegetation of the area. The limited opportunity for complete restoration of prospect sites would cause the naturalness in this area to be reduced for well beyond 20 years. The disturbance and access roads associated with the prospects would be readily seen over a large area. Even though only 28 acres of actual disturbance would occur, a total of about 10,000 acres in the Louse-Toppin-Owyhee River Canyon complex are projected to have naturalness substantially reduced because of the topographic features where the prospects would be located.

Conclusion

In the nonsuitable area, naturalness would be permanently reduced on 415 acres from new reservoir and fence construction. Naturalness would be reduced for over 20 years on 35,090 acres from vegetation treatments (burning and seeding). Some of this acreage (12,000 acres), plus an additional 1,300 acres (13,300 acres total) would have naturalness reduced for up to one year while oil/gas exploration drilling rigs are operating. Naturalness would be permanently reduced on 3,410 acres from pipelines and on 7,350 acres from powerlines. Naturalness would be substantially reduced on 10,000 acres for well beyond 20 years from mineral and geothermal exploration.

TABLE-IV-9

ADVERSE IMPACTS TO NATURALNESS - NO ACTION (NO WILDERNESS) SUBALTERNATIVE

W S A	SUITABLE AREA					NONSUITABLE AREA					WSA TOTAL				
	VEG. TRT.	UTILITY	MIN.	ENERGY	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL
OR-3-195 (ID-16-48B)	0	0	0	0	0	2,900	0	10,000	1,300 (1,900)	14,200	2,900	0	10,000	1,300 (1,900)	14,200
ID-16-48C	0	0	0	0	0	16,140	0	0	1,900 (3,500)	18,040	16,140	0	0	1,900 (3,500)	18,040
ID-16-49A	0	0	0	0	0	3,440	0	0	1,900 (2,800)	5,340	3,440	0	0	1,900 (2,800)	5,340
ID-16-49D	0	0	0	0	0	200	103	0	0	303	200	103	0	0	303
ID-111-49E	0	0	0	0	0	0	5	0	0	5	0	5	0	0	5
ID-16-52	0	0	0	0	0	1,360	320	0	0	1,680	1,360	320	0	0	1,680
ID-16-53 (NV-010-103A)	0	0	0	0	0	11,050	2,662	0	0	13,712	11,050	2,662	0	0	13,712
NV-010-106	0	0	0	0	0	0	7,670	0	0	7,670	0	7,670	0	0	7,670
TOTALS 1/	0	0	0	0	0	35,090	10,760	10,000	5,100	60,950	35,090	10,760	10,000	5,100	60,950

1/ Acreage does not include areas of small localized impact caused by reservoir or fence construction, "45" dam maintenance, boating launch site development, road/way development or recreation use.

2/ Parentheses () around energy numbers indicate acreages also affected by vegetative treatments. Energy acreages are not included in totals to prevent double counting.

Solitude Opportunities

Nonsuitable Area

Acquisition of 26,740 acres of non-federal lands would ensure that these lands, particularly private lands (1,720 acres) within the river canyons, are not developed or used for activities which could reduce solitude on adjoining WSA lands. Currently all of these lands are used for livestock grazing and occasional recreation. Wild river designation, and its accompanying notoriety, could result in one or more of the private land parcels in the river canyons (all of which are accessed by roads) being developed as a commercially operated, recreation oriented lodge or resort if the lands are not acquired. Such development could substantially reduce solitude opportunities on a localized basis as human activity increases. Since these lands would be acquired and development would be precluded, opportunities for solitude would not be affected.

Other non-federal land acquisition includes a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106. Following easement acquisition, management actions include constructing minimal recreation facilities (toilet and kiosk) and improving road access to make the area a boating launch site. Acquisition would also prevent potential commercial lodge development which would maintain existing solitude opportunities.

The launch site (road improvement, toilet and kiosk) at Twelve Mile in WSA NV-010-106 would be built on private lands under the authority of a recreation easement. Development of this new launch site would help disperse

river recreation use along the upper South Fork Owyhee River in WSA NV-010-106 and ID-16-53(NV-010-103A), and enhance solitude opportunities in this area.

River running recreation use is projected to reach 11,000 user days annually (Table IV-2). This use is expected to occur during an optimum 45-day float period sometime between April 1 and June 30 of each year depending upon climate and river flow conditions. The use would occur from 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks. On an average, this amount of use would equate to one trip starting on the East Fork every two days and on the South Fork about once or twice per day. In a good water year, currently the East Fork gets five trips per year (one launch every nine days); the South Fork gets ten trips (one launch every five days), the main stem Owyhee River gets 35 trips (one launch every one to two days). This change in launch frequency over 20 years would be a 500% to 1000% increase in the potential for recreation user group interaction. Because the rate of travel for each float party would be the same for the East Fork and South Fork, those groups starting from the upper river launch sites (WSA ID-16-49/52 and NV-010-106) would generally not encounter each other while floating on the two forks of the river. Float group interaction would generally begin on the Owyhee River in WSA ID-16-48B below the confluence of the East-South Forks where boating parties merge together. Presently, the merging of float trips on the Owyhee River results in less than one interaction between parties between the confluence and the Three Forks take-out/put-in. In 20 years, the expected group interaction would increase to five or more on this section of river. Below Three Forks in WSA OR-3-195, a launch schedule of four trips per day would raise group interaction rates from a current rate of less than one per day to four or more per day. Such increases in float group interaction would cause a notable loss in opportunities for solitude.

Backpacking use is projected to reach 1,220 user days annually in canyonlands and associated plateau rimrock areas. About 50% of the backpacking use would occur in the spring when river running activities are also occurring. The remainder of the backpacking use would occur during the fall. Presently, little or no interaction between boaters and hikers occurs due to the minimal amount of use and the fact that backpacking primarily occurs in tributary canyons such as Deep Creek, Battle Creek and Louse Canyon. In 20 years, it is projected that backpacking use would remain largely in tributary canyons. Backpacking/boating group interaction in the river canyons should remain at less than one per trip in the East Fork, South Fork and main stem Owyhee River system, therefore, backpacking use would minimally contribute to reductions in solitude opportunities.

When boaters and backpackers travel the river launch site access roads to reach the canyon areas, they will interact with those engaging in other primitive recreation or semi-primitive recreation experiences (mostly sightseeing in the spring, and mostly hunting in the fall). Semi-primitive recreation use is projected to reach 3,180 user days in 20 years. The combined activities of the boaters/sightseers or backpackers/hunters, etc. at the river launch sites would produce almost daily use of these sites and

cause a localized reduction in solitude opportunities at these sites. Construction of minimal recreation facilities at two launch sites (toilets and kiosks) would not contribute to increases in recreation use. The facilities would mitigate public health and safety concerns generated by increased recreation use.

Rangeland management actions would have no increased impact on solitude opportunities. The amount of human activity associated with construction and maintenance of fences and reservoirs, vegetative manipulation, and day-to-day grazing system management is not expected to change enough to affect current opportunities for solitude.

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor. Opportunities for solitude within the corridors would be temporarily (1.5 months) reduced during the construction period on 3,410 acres of the El Paso corridor in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106 and on 3,675 acres of the Twelve Mile corridor in WSA NV-010-106. Once construction is completed, occasional vehicle use on the two new ways developed along the Twelve Mile corridor powerlines in the southern portion of WSA NV-010-106 would slightly reduce solitude opportunities, principally during fall hunting. Though the El Paso corridor pipeline construction would result in a new road, it would immediately parallel an existing maintenance road. The new road would offer an alternative travel route in a currently traveled area rather than a new route in an untraveled area. Therefore, the new pipeline is not projected to result in increased motor vehicle use or in loss of solitude opportunities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. Human activity at the exploratory drill rig sites would be seen and heard over about 13,300 acres in the three WSAs for a period of nine to twelve months. This exploration activity would reduce solitude opportunities during the period of operation. Following completion of exploration activities, solitude opportunities would return to pre-exploration conditions.

About 10,000 acres of plateau lands in WSA OR-3-195 in the vicinity of the confluence of the Owyhee River and Louse Canyon and in the vicinity of Three Forks would be affected by 23 mining prospects and two geothermal exploration sites and related access ways. Human activity would reduce solitude opportunities in this area during the period that prospecting is active (up to one year). Following completion of prospecting activities, solitude opportunities would return to pre-prospecting conditions.

Conclusion

Notable localized reductions in solitude opportunities are projected in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to increased float group interactions. Localized reduction in solitude opportunities are projected at the boating launch sites where vehicle access along maintained roads would concentrate recreation use and cause frequent interaction between visitors. Short-term (1.5 month) reductions in solitude opportunities are

projected on 3,410 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106 during pipeline construction along the El Paso corridor. An additional 3,675 acres in WSA NV-010-106 would have solitude opportunities temporarily (1.5 months) reduced during powerline construction in the Twelve Mile corridor. A slight reduction in solitude opportunities would continue in this WSA as semi-primitive motorized recreation use occurs along vehicle routes established during powerline construction. Another 13,300 acres in WSAs OR-3-195, ID-16-48C and ID-16-49A would have solitude opportunities temporarily reduced (nine to twelve months) during oil and gas exploratory drilling activities. About 10,000 acres in WSA OR-3-195 would have reduced solitude opportunities for up to one year during mineral prospecting activities.

Primitive Recreation Opportunities

Outstanding primitive recreation experiences exist only on those lands which contain a high degree of naturalness and offer a high degree of solitude opportunities. Changes in either the degree of naturalness or solitude opportunities change primitive recreation opportunities. In the Owyhee Canyonlands WSA complex, opportunities for primitive recreation experiences would change on the same acreage where changes in naturalness or solitude opportunities occur. Naturalness and solitude opportunity impact areas generally coincide with each other except in the canyon areas where solitude impacts occur from recreation user group interaction.

Nonsuitable Area

Acquisition of 26,740 acres of non-federal lands would enhance opportunities for primitive recreation by ensuring that these lands remain natural in character and are not eventually developed with conflicting uses which could reduce opportunities for solitude.

Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would prevent potential conflicting uses and maintain naturalness and solitude opportunities which would enhance primitive recreation opportunities.

In the canyon areas, a slight localized reduction in primitive recreation opportunities would accompany reductions in solitude opportunities caused by increases in boating group interaction along the Owyhee River in WSA OR-3-195 (ID-16-48B), and by increased interaction between boaters and others who use the maintained roads into the various boating launch sites.

Construction of a boating launch site (improved road access, toilet and kiosk) at Twelve Mile in WSA NV-010-106 under the authority of a recreation easement would facilitate the dispersion of primitive recreation use on the upper South Fork Owyhee River; thereby enhancing primitive recreation opportunities through improved solitude opportunities.

Maintenance of the "45" Dam would allow the existing localized loss of naturalness in the South Fork Owyhee Canyon at the northern edge of WSA

ID-16-53 to continue. This loss of naturalness locally reduces existing primitive recreation opportunities because river runners must scout and run or line/portage an unnatural structure which blocks the otherwise free-flowing river system. Therefore, maintenance of the "45" Dam would not impact the existing level of primitive recreation opportunities.

Stabilization of historic sites (stone buildings and wood cabins) along the river would benefit primitive recreation opportunities by ensuring the continued enjoyment of viewing these structures for their cultural value. Though not natural in character, they stand as examples of how civilization has come and gone from the Owyhee Canyonlands and heighten the sense of harsh conditions and challenge associated with traveling and living in the area.

Construction of nine reservoirs and nine miles of fence in WSA OR-3-195, three reservoirs in WSA ID-16-48B and one reservoir in WSA ID-16-48C would cause localized reductions in naturalness on 415 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area. On the nonsuitable plateau, 35,090 acres would have primitive recreation opportunities reduced because of losses in naturalness due to the cultivated appearance associated with mechanical drill seeding in native vegetative communities.

Development of the El Paso and Twelve Mile corridors for buried pipelines or overhead powerlines would reduce primitive recreation opportunities. In WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106, 3,410 acres in the El Paso corridor would have primitive recreation opportunities moderately to severely reduced because of a loss of naturalness caused by the visual presence of another pipeline disturbance. Solitude losses would be temporary (1.5 months) during facility construction. Development of powerlines in the Twelve Mile corridor within WSA NV-010-106 would also moderately to severely reduce primitive recreation opportunities over 7,350 acres because of the loss of naturalness caused by the persistent views of the powerlines coupled with a slight loss in solitude opportunities due to some use of powerline access ways for motorized recreation activities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. This activity would be visible over 13,300 acres of surrounding lands, resulting in a temporary (nine to twelve month) loss of primitive recreation opportunities due to losses in naturalness and solitude opportunities.

The use of "thumper" trucks to do seismic testing on a grid pattern across plateau lands would also cause some reduction in primitive recreation opportunities for a period of five years as the naturalness of native vegetation recovers from vehicle track damage.

A temporary (less than one year) loss of solitude opportunities and a loss of naturalness for more than 20 years would occur over 10,000 acres in WSA OR-3-195 as a result of mineral prospecting and geothermal exploration. This loss of naturalness and solitude opportunities would result in a reduction in primitive recreation opportunities for more than 20 years.

Conclusion

Primitive recreation opportunities would generally be retained as a whole. Some localized reduction in primitive recreation opportunities would occur in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to projected increases in river boating use. Localized reductions in primitive recreation opportunities would also occur at boating launch sites where vehicle access along maintained roads would concentrate recreation use. Permanent reductions in primitive recreation opportunities would occur on 3,410 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106 from construction of a new pipeline in the El Paso corridor. Another 7,350 acres would have primitive recreation opportunities permanently reduced by powerline construction in the Twelve Mile corridor in WSA NV-010-106. About 35,090 acres of plateau would have primitive recreation opportunities reduced for over 20 years by mechanical drill seeding in native vegetation communities. Construction of 13 new reservoirs and nine miles of fence would locally reduce primitive recreation opportunities on a total of 415 acres. Losses in primitive recreation opportunities would occur for a period of nine to twelve months on a total of 13,300 nonsuitable acres within WSAs OR-3-195, ID-16-48C and ID-16-49A while oil and gas exploration activities are occurring and for over 20 years on 10,000 acres in WSA OR-3-195 from mineral prospecting and geothermal exploration.

Special Features (Bighorn Sheep)

Nonsuitable Area

Acquisition of land along the Owyhee River, Battle Creek and Deep Creek would enhance management and protection of bighorn sheep. Acquisition would ensure that potential resource uses on these lands would not adversely impact bighorn sheep in adjoining suitable areas.

It is projected that in 20 years river boating use would reach 11,000 user days annually (a 500% increase over present levels). Use on the East Fork Owyhee River would increase from an average of one trip every eight days to one trip every two days during the peak boating period. During the same period, the South Fork would increase to nearly two trips every day. At Three Forks, use would increase to four trips a day. These increases in use would be very gradual, and bighorn sheep would be able to adjust to this increased use because the sheep would primarily be at the upper levels of the canyon walls and the boaters would be down on the river. Sheep were found to be curious of boaters along the Colorado River as long as boaters stayed in the boats (Manson and Summer 1980). Human activity at favorite "camp spots" along the river would cause temporary displacement of sheep in the vicinity of the camp spots while human activity is occurring, but this displacement would be minor and would not effect bighorn sheep populations over the long term.

Recreation user day projections for primitive and semi-primitive recreation activities other than whitewater boating would be about 4,400 user days annually within 20 years. Much of this use, including all 1,220 user

days for backpacking/horsepacking and 50% or more of the hunting use (1,450 user days), would occur in association with canyon and plateau areas used by bighorn sheep. These recreation use levels could result in behavioral and/or physiological impacts to bighorn sheep. Studies by the U.S. Forest Service and California Department of Fish and Game (Light 1971, Graham 1971) have shown that human use of desert bighorn sheep habitat in excess of 500 visitor days (a visitor day being one 12 hour visit) can cause bighorn sheep to withdraw from their ranges. Another study of California bighorn sheep habitat in the Sierra Nevada Mountains (Dunaway1971) identified gaps between five bighorn sheep ranges corresponding to areas of high human use. Three of these ranges also suffered losses in population numbers after major increases in recreation use, while the populations in the other two ranges not exposed to surges in recreational use remained stable.

The tolerance of human activity by bighorn sheep can vary dramatically from one population to another. This variation depends upon many factors including the duration, frequency, location, season and nature of the disturbance and past experiences of the population and the individual mature sheep, particularly the herd leader. In the case of the Owyhee Canyonlands WSAs, the timing, location and frequency of recreation use are all of major concern. Over 50% of the projected backpacking/horsepacking use is expected to occur during the cooler, moist spring months during the bighorn lambing period when they are especially sensitive to disturbance. All of the hunting use would occur in the fall months in conjunction with backpacking and horsepacking use. Unlike the projected river boating use, much of the backpacking/horsepacking and hunting use would be located along the canyon rimrocks and in the major tributary canyons at or above the same topographical level where the bighorn sheep population normally resides. This topographic interrelationship between recreation users and bighorn sheep has been observed to cause greater distress than if recreation activities, such as boating, are confined to areas below the bighorns (Manson and Summer 1980). Consequently, projected backpacking/horsepacking and hunting use, combined with boating use, could cause disturbance to bighorn sheep populations. This disturbance would result in displacement of portions of the population into canyon areas to the north of the WSA complex unless the bighorn sheep are able to slowly adjust to human activity as recreation use increases.

Since state wildlife management agencies would continue wildlife population management practices, California bighorn sheep populations are projected to grow and serve as a source for transplants to other areas. Use of helicopters for trapping and transplanting bighorn sheep would continue to support establishment and expansion of the population. Maintenance of existing road networks between and adjacent to the WSAs would allow vehicle access for state game agencies to carry out transplanting programs.

Prescribed burning would be beneficial to bighorn sheep, especially where areas are burned within two miles of the canyon rims. The burns would open up dense sagebrush stands and allow native grasses and forbs (Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox) to increase. This improved range condition on the plateau would increase forage availability and improve overall habitat conditions (forage/cover ratio) for bighorn sheep.

Construction of new reservoirs would improve bighorn habitat and their distribution. Although reservoirs near the canyon would be 1/2 to 1 mile from the canyon rims, they would still improve distribution for bighorn as well as livestock. These reservoirs will allow for more even utilization of the forage by both livestock and bighorns on the plateaus.

Human activity associated with pipeline construction near the canyon in WSAs ID-16-49D and ID-16-52 (El Paso corridor) would cause localized disturbance and short-term displacement (1.5 months) of sheep adjacent to the pipeline corridor but would not affect population numbers.

Human activity associated with mineral prospecting (23 sites) and geothermal exploration (two sites) in WSA OR-3-195 would cause localized disturbance and short term displacement (up to one year) of bighorn sheep during prospecting and exploration activities but would not affect population numbers.

Based on current population estimates, projected recreation increases, available habitat, new reservoirs and improvements in range conditions, bighorn sheep populations are projected to reach 900-1,200 animals in 20 years, a 300% increase over present levels.

Conclusion

In the nonsuitable area, land acquisition along the Owyhee River, Battle Creek and Deep Creek would ensure that bighorn sheep in adjacent areas are not adversely impacted. Increased recreation use could disturb bighorn sheep populations and cause displacement over the long term. Pipeline construction across the canyon in WSAs ID-16-49D and ID-16-52 would cause short-term displacement of bighorn sheep. Mineral prospecting and geothermal exploration activities in WSA OR-3-195 would also cause short-term displacement. Within the WSA complex, bighorn sheep populations are projected to expand into available unoccupied habitat. The population projection over the next 20 years is 900 - 1,200 animals.

Special Features (Cultural Values)

Nonsuitable Area

The projected 20 year boating use levels of 11,000 user days annually would mean that prehistoric lithic scatters, multi-functional campsites, rockshelters and rock art sites sites within the river canyons would be visited by parties of up to 15 people on an average of once every two days on the East Fork of the Owyhee River; twice a day on the South Fork; and four times a day below Three Forks during the peak use period of April 1 through June 30. While public education and information efforts would discourage most people from acts of vandalism and theft, the number of such acts would likely increase as visitor use rises over the next 20 years.

Land acquisition actions would have a beneficial impact on cultural resources. Five significant historic site complexes located in the river canyons would be acquired. These sites are important not only for their scientific research potential but for the outstanding recreational/aesthetic values they possess. Acquisition of private lands removes the possibility that sites on those lands would be disturbed or destroyed as a result of commercial recreational development.

Improving the road through private land at Twelve Mile would allow for a moderate localized increase in theft and vandalism of cultural resources in a formerly little-visited area. Acquisition of a 280 acre recreation easement at Twelve Mile would benefit cultural resources by removing the possibility that sites within the easement would be disturbed or destroyed as a result of commercial recreational development. Acquisition of this easement would also allow BLM to reduce deterioration of historic structures at Twelve Mile through stabilization and protection.

Stabilization of 9 historic structures within the river canyons (6 on private lands, 3 on BLM lands), would have a substantial beneficial impact on cultural resources by reducing the current deterioration of significant properties, enhancing the aesthetic qualities of the area for visitors, and preserving scientific information on historic settlement patterns and lifeways for future study.

Livestock use on nonsuitable areas would rise approximately 51% overall and increased damages to cultural resources as a result of increased trampling and related erosion would be significant. This increase in trampling damage would be slightly moderated by implementing grazing systems which would redistribute impacts over a broader area.

Moderately increased localized levels of vandalism and theft of cultural resources would occur as a result of development of new vehicle ways (access roads) associated with the new powerlines in the vicinity of Twelve Mile in Nevada. Slight short-term (nine to twelve months) localized increased vandalism and theft of cultural resources would also occur in the vicinity of the access roads to three oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting and geothermal exploration sites in Oregon.

Vegetative manipulation (burning and plowing and seeding with rangeland drills), installation of range improvements (reservoir and fence construction), construction of recreational facilities (toilets, kiosks and signs) and construction of a pipeline adjacent to the existing El Paso Gas Pipeline are all actions which have potential to disturb or destroy cultural resources which lie within their immediate impact areas. Should a significant site be discovered during any of these actions, potential impacts would be mitigated in advance of project construction after consultation with the State Historic Preservation Officer. Appropriate mitigating measures might include avoidance of a site by relocating or not authorizing a project, modification of a project to eliminate impacts, test or salvage excavation of endangered portions of a site, or merely recording a site. Once mitigation has been determined, project implementation is normally considered to have no impact on cultural resources.

Conclusion

Increases in boating use would lead to increased levels of vandalism and theft in the river canyon areas over time. Acquisition of private lands containing five historic sites, and stabilization and protection of structures at those sites plus three sites on BLM lands would reduce the deterioration of significant resources and enhance the recreational/aesthetic experience for river users. Acquisition of a 280 acre recreation easement at Twelve Mile would allow protection of a significant historic site. Increased livestock use would significantly increase trampling damage. Moderate localized increases in vandalism and theft at cultural sites would occur as a result of road improvement through private land at Twelve Mile in Nevada and as result of new access roads associated with powerline development in Nevada. Slight short-term (nine to twelve months) localized increases in vandalism and theft would occur in the vicinity of the access roads to the oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting and geothermal exploration sites in Oregon.

IMPACTS TO THE CONDITION AND AMOUNT OF NATIVE VEGETATION

Nonsuitable Area

Several sensitive plant sites would come under federal jurisdiction and protection as a result of land acquisition or exchange actions. Hedgehog cactus (Echinocactus simponsi), Inch-High Lupine (Lupine uncialus) and Bailey's Ivesia (Ivesia baileyi) are known to occur on state and private lands that are proposed for acquisition or exchange. There would be no impacts to these species since there are no management actions which would affect these plants.

Development and use of two boating launch sites would impact vegetation in the canyons. Vegetation would be removed during construction of toilets and kiosks at these sites. Increases in recreation use would increase trampling and result in the establishment of trails and tent pads in the vicinity of the sites. Vegetative cover in the vicinity of the two launch sites would be lost over the long term on a total of five acres.

Increased recreation use would affect vegetation along two sections of river canyons; the upper South Fork Owyhee River in WSA NV-010-106 and the middle section of the Owyhee River in WSA OR-3-195. In these river sections, increased boating use combined with limited campsite availability would result in trampling and loss of vegetative cover on a total of five acres at the campsites.

Maintenance of the irrigation dam servicing the "45" Ranch on the South Fork Owyhee River would result in minimal disturbance. The established road would be used to move any needed equipment to the site. A small area of less than two acres has been set aside to provide fill for dam maintenance and vegetation at this site would be lost.

TABLE IV-10

IMPACTS TO ECOLOGICAL CONDITION OF NATIVE VEGETATION
FROM THE NO ACTION (NO WILDERNESS) SUBALTERNATIVE (BLM ACRES)

WSA	Nonsuitable Area		
	Ecological Condition		
	Good Condition Retained	Poor/Fair Condition Improved	Native Vegetation Displaced
OR-3-195	61,750	127,500	1,450
ID-16-48B	12,850	20,850	0
ID-16-48C	6,365	16,060	2,175
ID-16-49A	10,035	59,550	575
ID-16-49D	2,390	7,525	75
ID-111-49E	2,375	29,165	0
ID-16-52	4,270	8,705	175
ID-16-53	14,560	25,550	2,400
NV-010-103A	1,700	6,142	0
NV-010-106	2,800	19,075	0
TOTALS	119,095	320,122	6,850

Prescribed burning would occur on 29,300 acres of big sagebrush sites across the plateau, about 15,600 acres within the Owyhee River Management Area (ORMA) and about 13,700 acres outside the ORMA. Following burning on the 29,300 acres, it is projected that about 50% of the burned areas outside the ORMA in Idaho would be seeded to non-native species. The grass/forb composition of the vegetation communities would increase and result in a vegetative mosaic of open grassy areas intermixed with areas containing various ages of low and big sagebrush. Therefore, about 6,850 acres of big sagebrush on the plateau would be displaced by non-native grass species, mostly on the Idaho WSA lands south of the Owyhee River and East Fork Owyhee River.

On untreated areas (both big and low sagebrush ecological sites) across the plateau, improved livestock grazing systems would redistribute livestock use and increase the abundance and vigor of native grasses (principally Idaho fescue and bluebunch wheatgrass) and forbs. The increased amount of native grasses and forbs, together with the increased non-native grasses following burning and seeding, would be available for livestock forage. Utilization levels of up to 50% (by weight) would be allowed and livestock use would increase 51%. The abundance and vigor of native grasses and forbs would increase. The current poor or fair ecological conditions of native plant communities on the plateau (about 320,122 acres) would improve. Plateau

areas with crested wheatgrass or Siberia wheatgrass seedings would show an encroachment of sagebrush. Canyon and plateau areas in good ecological condition (approximately 119,095 acres) would remain in stable condition.

Construction of 13 new reservoirs in the nonsuitable area would result in the loss of 26 acres of native vegetation.

A new pipeline in the El Paso corridor would disturb a 25 foot wide strip about eight miles long within ID-16-49D, ID-111-49E and NV-010-103A. The pipeline strip would be mechanically altered with half the acreage (eastern half) rehabilitated and returned to native species in a three to five year period with sagebrush canopy cover returning within 20 years. A regularly maintained dirt road would be constructed along the west side of the pipeline. The maintenance of the new pipeline road is expected to permanently remove 12 acres of native vegetation. Regular maintenance and inspection actions are expected to keep the roadway clear of vegetation.

Development of the Twelve Mile Corridor in WSA NV-010-106 projects two paralleling high voltage powerlines constructed approximately one mile apart. At least 27 towers would be constructed within the WSA complex. Approximately 15 acres of native vegetation would be disturbed or removed during construction of the towers. Vegetation would be permanently lost on 1 1/2 acres. Full vegetative recovery on 13 1/2 disturbed acres would occur in 20 years. No new roads would be built, but each powerline would have a vehicle way developed to facilitate line inspection and maintenance. Vegetation disturbance on these ways would be substantial during the construction period. Within five to ten years after powerline construction, native vegetation would reclaim these ways except in the wheel tracks where shrubs would not become reestablished.

Oil and gas exploration actions would impact native vegetation. Seismic testing with specialized vehicles would impact or "thump" the ground to obtain seismic readings. These vehicles would travel cross-country when necessary in a three to five mile wide grid pattern. Wheel tracks would remain behind, but vegetation would recover within three to five years depending on climatic conditions. Exploratory drillings would disturb a total of 30 acres of native vegetation at three sites in WSAs OR-3-195, ID-16-48C and ID-16-49A. The sites would remain disturbed for a period of nine months to one year. Following the completion of exploration activities, topsoil at the sites would be replaced and the disturbed areas seeded to native vegetation. Within five years all three sites would be rehabilitated with native vegetation, including the ways, with a mixture of grasses and shrubs. Complete restoration of the sagebrush canopy would take from ten to 20 years.

Mineral prospecting would eliminate a total of 23 acres of vegetation on 23 sites and geothermal exploration would eliminate a total of five acres on two sites. The sites would be rehabilitated (recontoured and seeded) following prospecting and exploration. Reestablishment of vegetation would take up to 20 years.

Conclusion

Ten acres of vegetation would be lost at boating launch sites and along the upper South Fork Owyhee River and the middle section of the Owyhee River due to increased recreation use. Two acres of vegetation would be lost through the "45" Dam maintenance. Poor/fair condition native vegetation (320,122 acres) would improve and good condition native vegetation (119,095 acres) would remain stable. Prescribed burning would occur on 29,300 acres of which 6,850 acres would be displaced by non-native species. Native vegetation would be permanently lost on approximately 12 acres of the total 25 acres disturbed by the establishment of a new pipeline/maintenance road within the El Paso corridor. Within the Twelve Mile corridor, 1 1/2 acres of native vegetation would be permanently lost and 13 1/2 disturbed acres would recover in 20 years. Oil and gas exploration would displace a total of 30 acres, but rehabilitation of the disturbed sites would occur in five to 20 years. Mineral prospecting would disturb 23 acres and geothermal exploration would disturb five acres with recovery projected within 20 years. Loss of 26 acres of vegetation would occur from construction of 13 reservoirs.

IMPACTS TO THE LEVEL OF SELECTED WILDLIFE POPULATIONS

Nonsuitable Area

Acquisition of 26,740 acres of non-federal lands (and a 280 acre recreation easement) would enhance management and protection of mule deer, pronghorn, redband trout and sage grouse by preventing potential conflicting uses which could adversely impact these wildlife populations and their habitats. Although management opportunities would be generally enhanced through acquisition, no specific wildlife habitat improvement projects are proposed and wildlife habitat is not projected to change substantially. Therefore, wildlife populations are not projected to increase solely because of acquisition.

Increased recreation use along roads and ways in the vicinity of the canyon rims would cause disturbance to mule deer, pronghorn and sage grouse but would not affect population levels.

Land treatment projects on 29,300 acres would improve forage and cover for mule deer, pronghorn and sage grouse populations as in the Proposed Action, suitable area. However, the increase in livestock use (14,819 AUMs) would lead to increased competition with wildlife for the additional forage created by burning and seeding. Construction of new rangeland facilities (13 reservoirs and nine miles of fence) would have the same impact to wildlife populations as described in the Proposed Action, suitable area. However, the increase in livestock numbers would increase competition with wildlife for the benefits derived from these projects. As a result of the improved habitat on 29,300 acres and an increase in competition from increased livestock use, mule deer, pronghorn and sage grouse populations are projected to remain stable or decrease up to 15% from rangeland management actions.

Construction of a pipeline in the El Paso corridor and a powerline in the Twelve Mile corridor would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse. Pipeline and powerline construction would each last 1 1/2 months. Since habitat changes would be minimal, population levels would not be affected.

Oil and gas exploration activities on plateau lands would effect mule deer, pronghorn and sage grouse, the same as in the Proposed Action. Stipulations on oil and gas leases would minimize impacts by prohibiting activity during the times when mule deer, pronghorn and sage grouse populations are most sensitive to human activity. These times correspond to mule deer use on winter range, pronghorn use on winter and fawning ranges and sage grouse use on winter range, breeding grounds and nesting/brood rearing areas. The ten acre disturbed area associated with each of three exploration sites would be temporarily avoided by mule deer, pronghorn and sage grouse using the area. It would take between three to five years for the site to return to native vegetation cover and for wildlife populations to fully reinhabit the disturbed sites. This temporary and relatively small reduction of habitat would not affect population levels. Overall, wildlife population levels would not be impacted by oil and gas exploration activities.

Mineral prospecting at 23 sites in WSA OR-3-195 is projected to deposit fine sediments in the West Little Owyhee River (Louse Canyon). Sedimentation in the Owyhee River due to activities primarily outside the WSA is already adversely impacting fisheries in that river. Depending on the mining method used, it is projected that sedimentation in the West Little Owyhee River would increase by up to 25% due to mineral prospecting at 23 sites. This increase in sedimentation would have significant adverse impacts on the fisheries. Trout "redds" would become unusable because silt deposits would cover gravel and riffle areas used as spawning habitat. Sediment deposits would also reduce water depths, reduce rearing areas and hiding cover, increase water temperatures, and reduce oxygen availability. All of these impacts would adversely impact fish populations and reduce the aquatic invertebrate populations which the fish populations depend on. Given this increase in sedimentation and the lack of flushing flows to remove sediments under low flow conditions, fish populations along 15 miles in the West Little Owyhee River could be reduced by up to 50%. Heavy metal toxics leeched or released directly into the stream could reduce fish and invertebrates outright or could bioaccumulate and reduce fish and invertebrates over time.

Human activity associated with mineral prospecting at 23 sites and geothermal exploration at two sites would cause localized disturbance and displacement of mule deer, pronghorn and sage grouse for up to one year, but would not impact populations. Loss of vegetation at these sites would not impact wildlife populations.

Conclusion

Land acquisition would benefit wildlife by eliminating potential resource conflicts. Increased recreation use along the canyon rims would temporarily disturb wildlife. Utility corridor actions, oil and gas exploration, mineral prospecting and geothermal exploration would cause short term disturbance and

displacement of mule deer, pronghorn and sage grouse inhabiting the impact area. Mineral prospecting in WSA OR-3-195 could cause up to a 50% reduction of fish populations in the West Little Owyhee River. Mule deer, pronghorn, and sage grouse populations would remain stable or decrease up to 15% as a result of rangeland management actions.

IMPACTS TO THE LEVEL OF SEMI-PRIMITIVE RECREATION

Nonsuitable Area

Of the 14,200 acres of non-federal lands recommended for acquisition, 880 acres are private lands presently accessed by motor vehicles for semi-primitive recreation activities (principally vehicle camping, hunting, sightseeing and some fishing). Acquisition of non-federal lands would have no impact on the level of semi-primitive recreation use on nonsuitable lands other than a slight increase in semi-primitive motorized recreation opportunities resulting from acquisition of a recreation easement at Twelve Mile in WSA NV-010-106. This easement would allow for public access into the Twelve Mile boating launch site on private property.

Upgrading the access road into the boating launch site at Twelve Mile in WSA NV-010-106 and constructing toilets and kiosks at the site would increase motorized recreation opportunities by making the site easier to drive to and a more desirable destination.

The No Action (No Wilderness) Alternative would allow motorized recreation use on 152.7 miles of roads and ways within the WSAs including the major road access to the boating launch sites between the WSAs as well as providing some minimal facilities (toilets) at the sites. Semi-primitive motorized recreation use associated with these roads and ways and access roads would continue. The roads would provide opportunities for recreation users to reach the river canyons for hunting as well as allow opportunity for sightseeing, rock hounding and vehicle camping.

Development of the Twelve Mile corridor would result in the establishment of vehicle tracks along two powerlines leading from the east and west boundaries of WSA NV-010-106 to the canyon rimrocks of the South Fork Owyhee River. These routes would provide hunters, rock hounds and sightseers with new recreation opportunities. Development of the El Paso corridor would result in a new pipeline and accompanying maintenance road in WSA ID-16-49D, ID-111-49E and NV-010-103A. However, this new road would be only 50 feet from the existing road along the El Paso Gas Pipeline and, therefore, would not increase recreation use or opportunities.

Oil and gas exploration activities would generate a number of miles of temporary two-track vehicle access routes in WSA OR-3-195, ID-16-48C and ID-16-49A which would be fully rehabilitated following exploration and not open to motorized recreation use.

Conclusion

Maintenance of existing river access roads to boating launch sites between the WSAs would ensure continued use of these canyon areas. The addition of the Twelve Mile access road and river launch site on private lands in WSA NV-010-106 would slightly improve semi-primitive motorized recreation opportunities. Utility corridor development in Nevada WSA NV-010-106 would slightly increase semi-primitive motorized recreation opportunities.

Within 20 years, hunting is projected to reach 2,900 user days annually while use for other activities (sightseeing, rock hounding and vehicle camping) is projected to reach only 280 user days (Table IV-2).

IMPACTS TO THE LEVEL OF LIVESTOCK USE

Nonsuitable Area

Full use of motorized vehicles would be allowed for general livestock management and to maintain and construct rangeland facilities. Thirteen reservoirs and nine miles of fence would be constructed. Estimated livestock use within affected allotments would increase by 66,146 AUMs (230,319 AUMs to 296,465 AUMs) in 20 years. This would be a 29% increase over the current active preference for all allotments (Table IV-5). Estimated livestock use within the WSA boundaries would increase by 14,819 AUMs in 20 years (51% increase) (Table IV-6).

Conclusion

Full use of motorized vehicles would be allow for livestock management. Livestock use within the affected allotments would increase 66,146 AUMs (29%). Livestock use within the WSA boundaries would increase 14,819 AUMs (51%). Thirteen reservoirs and nine miles of fence would be constructed.

IMPACTS ON THE LEVEL OF SOIL EROSION

Nonsuitable Area

Rangeland burning with or without seeding is projected for 29,300 acres. The 2,930 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

The projected 51% increase in livestock use over a 20 year period would affect the broad based soil resource through reduction of vegetative cover and additional trampling resulting in increased erosion and compaction. Erosion would show the largest increase around livestock concentration areas and on steep hillsides. The areas most affected would be WSAs NV-010-106, OR-3-195, ID-16-48C, ID-16-48B, ID-111-49E, ID-16-49A and ID-16-53. Improved grazing systems (including the proposed range improvement projects) would improve range condition which would tend to reduce soil erosion. The overall increase in livestock use would increase erosion rates by 10% to 20% (0.2 to 0.4 tons/acre/year) for the entire WSA complex.

Pipeline construction would cause short-term (one to two years) impacts consisting of compaction, mixing of soil layers, and loss of vegetative cover. The maintenance road to be constructed in association with the El Paso corridor would produce about 17.5 tons/year of soil loss.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 4B througgh 4D). Soil compaction and loss of vegetative cover would result from these operations. A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operaation or brought to the surface may be toxic to vegetation and act as a soil sterilant. Areas affected would be small (less than ten acres per site) and would rehabilitate in three to five years.

Impacts from two geothermal exploration exploration sites in WSA OR-3-195 would be the same as for oil and gas exploration except that a total of five acres would be disturbed.

Mineral prospecting is projected in WSA OR-3-195 at 23 sites (Map 4A and 4B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and increase sediment loads into the West Fork Little Owyhee River (Louse Canyon). Toxic substances could be brought to the surface making the soil around the tailings pile sterile and retarding revegetation. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

Broad based erosion rates would increase by about 10% to 20% (0.2 to 0.4 tons/acre/year) over the current rate of 2.0 tons/acre/year.

IMPACTS TO WATER QUALITY

Nonsuitable Area

The projected 51% increase in livestock use would increase broad based soil erosion about 10% to 20% and increase the amount of sediment to waterways by 10% to 20%.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 4B through 4D). A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic and in the remote event that these substances accidently enter waterways, water quality would be adversely affected.

Impacts from geothermal exploration at two sites in WSA OR-3-195 would be the same as for oil and gas exploration.

Mineral prospecting is projected in WSA OR-3-195 at 23 sites (Map 4A and 4B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and increase sediment loads and degrade water quality in the West Fork Little Owyhee River (Louse Canyon). Toxic substances could be brought to the surface and could enter waterways and degrade water quality. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

Suspended sediment loads would be increased 10% to 20%. There is a remote possibility of toxic materials from oil and gas exploration and mineral prospecting adversely affecting water quality.

IMPACTS ON LOCAL INCOME AND JOBS

The AUMs available in the affected allotments in 20 years could result in an annual income of $3.0 million. This would be a 58% increase over the present situation (1982 licensed actual use). Recreation use in the WSAs projected in 20 years would result in annual income of $545,000 which is a 297% increase over the present situation.

Employment related to the available AUMs would be 83 jobs in 20 years. There would be 133 jobs in 20 years associated with the projected recreation use. These would be increases of 58% and 151% respectively.

The total income and employment impacts (in 20 years) from this alternative would be $3.5 million and 216 jobs. These would represent 1.0% and 0.7% of the 1981 local personal income and employment respectively. The total increase in income (above existing situation) would be $1.5 million or 0.4% of the 1981 local personal income. The total increase in employment would be 110 jobs or 0.4% of the 1981 employment in the local economy. These increases would be insignificant to the local economy.

Conclusion

The No Action (No Wilderness) Subalternative would result in a 0.4% increase in personal income and a 0.4% increase in employment over 20 years in the three-county area.

CANYONLANDS WILDERNESS ALTERNATIVE

Under the Canyonlands Wilderness Alternative 88,900 acres of public land in the canyons of the eight WSAs in Oregon, Idaho and Nevada are recommended suitable for wilderness designation. The remaining 357,167 acres of the WSAs are recommended nonsuitable for wilderness. Of the nonwilderness lands, 207,230 acres would be managed under the current BLM Owyhee River Management Area administrative designation.

IMPACTS TO WILDERNESS VALUES

Naturalness

Suitable Area

Land acquisition efforts are projected to add 7,530 acres to the suitable area. Acquisition of these lands would protect existing naturalness by ensuring against potential uses that could reduce naturalness. These lands have the potential for conflicting uses including the development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions, cultivated pastures and exploration for energy and mineral resources. A wilderness designation would increase the likelihood that interlocked private lands within the river canyons would be developed for recreational purposes because of the increased notoriety of the area.

River recreation use is projected to reach 11,000 user days annually within 20 years, a 500% increase over current use. This use would occur from about 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks during the 92 days within the carrying capacity monitoring period (April 1 through June 30 of each year).

The projected trip starts on the upper Owyhee River system (above Three Forks, Oregon) would result in about 525 campsite uses per year in 20 years, a 350% increase over current use. There are several hundred campsites along the river above Three Forks which is adequate to satisfy this projected demand without overcrowding. Because of the adequate supply of campsites, increased river recreation use is projected to only slightly reduce or change vegetative cover from trampling at the upper river campsites. The trampled vegetation would be a minimal visual impact which would reduce naturalness in the vicinity of the campsites. Therefore, impacts to naturalness at the upper river campsites from increased river recreation use are projected to be minimal.

Campsites along the middle Owyhee River (between Three Forks and Rome, Oregon) are limited (23 campsites) because of the steep slopes and narrow rocky canyon. A total of 194 trips per year, an increase of 325% over current use, would increase trampling of vegetation in these campsite areas. Management under the concept of the Limits of Acceptable Change (General Technical Report INT-176, Stankey 1985), which would include issuing permits and encouraging alternate campsites, would limit trampling of vegetation (changes in natural character) to less than significant. Therefore, increased river recreation use would not significantly impact naturalness of the middle Owyhee River campsites.

Development and use of two boating launch sites would impact the natural landscape on a total of five acres. Facility construction (toilets and kiosks) would result in soil disturbance, however, revegetation of disturbed areas would occur within three years. Increased visitor use would result in the establishment of on site trails and tent pads. Toilets and kiosks would remain over the long term and would be a visual impact which would reduce naturalness in the immediate vicinity. Therefore, development and use of boating launch sites would cause minimal localized impacts to naturalness on a total of five acres.

The "45" Dam on the South Fork Owyhee River would be maintained to provide boater passage and irrigation water to private pasture lands along the South Fork Owyhee River between WSAs ID-16-48B and 16-53. Although not within a WSA, the dam and borrow pit area (two acres used for dam maintenance) are visible from the northernmost canyon area of WSA ID-16-53. Dam maintenance (replacement of dislodged rock material) would not change the appearance of the dam but would prevent revegetation of the borrow pit over the long term. The adverse visual impacts of the dam and borrow pit (vegetation removed or disturbed) would continue to cause localized reductions in naturalness over the long term on about two acres within the South Fork Canyon.

Stabilization of historic stone and wood buildings along the river system (mortaring, applying wood preservative, and re-roofing with timbers and sod) would prevent further deterioration and allow these structures to remain in place. The original design and appearance of the structures would be restored and maintained. The stabilization would not cause any additional impacts to naturalness along the river system.

Closure of six miles of roads and ways to motorized recreation use would affect naturalness. None of the six miles of roads and ways within the canyons are projected to be used by livestock permittees to maintain reservoirs or fences. Nonuse of vehicle routes would result in the revegetation of roadbeds and wheel tracks with both grass and shrub species (primarily sagebrush) within 20 years. Therefore, the complete revegetation of six miles of roads and ways would slightly enhance naturalness and improve the natural character in the canyons in the vicinity of the closed roads and ways.

The projected 500% increase in annual boating use levels (11,000 user days) combined with the 124% increase in land-based recreation activities (1,905 user days in suitable area) would increase vehicle traffic on the river access roads which would remain open. Since the access roads would be maintained to existing standards, this increased vehicle traffic would not change the visual appearance of the access roads nor add to the existing visual impact that these roads have on naturalness. Therefore, there would be no impact on naturalness from increased vehicle traffic on river access roads.

Of the total 1,905 user days projected annually for land-based recreation activities, 672 user days are projected for backpacking activities. This primitive recreation use would be dispersed throughout the canyons and would have no impact on naturalness.

There would be no rangeland management actions in the suitable area which would impact naturalness.

Utility corridor development would not occur on suitable lands. However, an additional pipeline adjacent to the existing El Paso gas pipeline on nonsuitable WSA lands would impact naturalness on about 120 acres of adjoining suitable lands. The impact would be a disturbance or change in the appearance of the landscape consisting of a 25-foot wide line of contrasting vegetation noticeably shorter than in surrounding areas and a dirt access road. This change in appearance would reduce naturalness over the long term. An additional pipeline in WSA ID-16-49D would be visible from about 120 acres of the East Fork Owyhee River canyon and plateau rimrock areas in the northwest periphery of adjacent WSA ID-16-52. The additional pipeline would be buried or suspended immediately adjacent to the existing pipeline (25 feet instead of 50 feet) within the canyon and the existing 25-foot wide disturbance would be widened by about 12 feet. During construction of the additional pipeline, the existing disturbed area would be rehabilitated (recontoured and seeded) and although the total disturbed area would be 12 feet wider, the existing disturbance would be less noticeable following rehabilitation. Suspending another pipe across the river canyon would not noticeably add to the reduced naturalness caused by the existing suspended pipe. Consequently, reductions to naturalness in WSA ID-16-52 are projected to be noticeable on 120 acres. In total, naturalness would be reduced on 120 suitable acres over the long term from an additional pipeline on nonsuitable lands adjacent to the existing El Paso gas pipeline.

There would be no mineral or energy exploration actions in the suitable area that would impact naturalness.

Nonsuitable Area

Federal-state land exchanges are projected to transfer 19,210 acres of Idaho state land which adjoin nonsuitable WSA plateau lands to federal ownership. These state lands contain grass/sagebrush vegetation used primarily for livestock grazing. Whether the lands are in state or federal ownership, livestock use is projected to continue. This use of the non-WSA lands would have no impact on the naturalness of nonsuitable WSA lands. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would protect existing naturalness by ensuring against potential uses that could reduce naturalness. The easement would prevent potential development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions and cultivated pastures which could reduce the sense of naturalness found on adjoining nonsuitable WSA lands to the southeast and southwest of the property.

Development of a launch site (toilets, kiosk and road access) would cause a localized reduction in naturalness on about two acres on private land at Twelve Mile.

The 146.7 miles of cherrystem roads and ways remaining open for general public recreation use on plateau lands are projected to receive 2,355 user days of semi-primitive recreation use. This low level of recreation use would not increase vehicle use on the affected roads/ways to a level high enough to change the existing visual appearance of vehicle routes on the landscape. Therefore, impacts to naturalness from increased semi-primitive recreation use are not projected to increase.

The nonsuitable plateau lands are projected to receive 448 user days of backpacking activity, primarily along the canyon rimrocks. This use would be sufficiently dispersed so as not to reduce naturalness of the affected lands. About 50 of the 448 user days of backpacking use associated with the canyons/rimrocks is projected in the nonsuitable canyon/rimrocks of WSA NV-010-106. This level of backpacking use would have no increased impact on naturalness.

Maintaining and reconstructing existing rangeland management facilities (reservoirs) would impact naturalness. With a 20-year maintenance cycle for reservoirs (stock ponds), five or six reservoirs would be maintained each year using bulldozers. Recontouring dams and dirt piles associated with the reservoirs would reduce the area in which the reservoirs could be seen and would make them appear more like natural features; thereby reducing their impact upon the natural landscape. Localized adverse visual impacts caused by cross-country access by bulldozers to some sites would last from five to ten years and would generally be confined to a small area in any given year. The impacts would consist of crushed sagebrush vegetation running in two parallel lines crossing the plateau landscape which would be visible only if a person is standing on the bulldozer tracks looking up and down their length. They would remain virtually unseen from lands adjacent to the tracks because of screening by sagebrush. Because many of the reservoir sites are accessed by existing roads or ways, cross-country travel impacts from bulldozers would be limited. During the short term, naturalness would be adversely impacted for about five years at each reservoir site that is maintained or reconstructed until vegetation is reestablished. Based upon these findings, maintenance and reconstruction of reservoirs would result in a reduction in the current adverse visual impact of these reservoirs which would enhance naturalness in the vicinity of the reservoirs over the long term.

Maintenance of other rangeland facilities (fences, springs, pipelines) would continue. There would be no change in the appearance of these facilities and periodic vehicle use by livestock permittees for maintenance would continue along existing roads and ways. Therefore, maintenance of other rangeland facilities would not have an increased impact on existing naturalness.

Construction of new rangeland facilities (13 reservoirs and nine miles of fenceline) would affect naturalness on 415 acres (including actual

disturbance areas and visual zones, about 25 acres per reservoir and 10 acres per mile of fence). New reservoirs would be constructed to mitigate their localized adverse visual impacts to naturalness (low, rounded/crescent/oval forms) and to generally blend with the environment. The visual impacts from the addition of these new facilities would be minimal since they would not result in a notable increase in the overall visual impact on naturalness in the nonsuitable area as a whole. In total, construction of new rangeland facilities would cause site specific reductions in naturalness on 415 acres (nine reservoirs and nine miles of fence in WSA OR-3-195, three reservoirs in WSA ID-16-48B, and one reservoir in WSA ID-16-48C).

Naturalness on plateau lands, both within and outside of the Owyhee River Management Area (ORMA), would be affected by prescribed burning (29,300 acres; 2,930 acres per year average with reburning every 20 to 30 years) and improved grazing systems. Within the ORMA, 15,600 acres would be burned and allowed to revegetate naturally or be seeded (aerial only) to native species. Outside the ORMA, 13,700 acres would be burned, 50% (6,850 acres) would be drill seeded with non-native species, and 50% would be seeded aerially with native species or allowed to revegetate naturally. Prescribed burning and subsequent revegetation would result in fewer shrubs and an increase in native grasses and forbs. Improved grazing systems would change livestock distribution and reduce grazing pressure. Reduced grazing pressure would allow native grasses and forbs to further increase which would reduce the grazed appearance. However, the increased abundance of grasses on both treated and untreated areas together with the corresponding increase in the number of livestock would maintain rather than reduce the grazed appearance of the landscape. The 6,850 acres treated with drill machinery would suffer a severe loss of naturalness. The drill machinery would establish the seeded vegetation in a linear or striated growth pattern (cultivated appearance) which would contrast with natural growth patterns. Because land treatment within the Idaho WSAs (5,400 acres) would occur intermixed among native vegetation areas, the adverse impact to naturalness would extend over much of the non-ORMA lands (35,090 acres) south of the Owyhee and East Fork Owyhee Rivers. It would be difficult to travel across these portions of plateau without encountering unnatural treated areas. In Oregon WSA OR-3-195, reductions in naturalness would be located in one relatively small area (2,900 acres) in the southeast portion of the WSA. It would be over 20 years before the cultivated appearance would disappear and the apparent naturalness is restored. The rate of restoration would be largely dependent upon the rate of sagebrush regeneration on seeded sites.

In Oregon WSA OR-3-195, forage utilization levels of native vegetation communities on many portions of the plateau are relatively low, running as low as 10% to 20% of available forage. Existing grazing systems would remain in place and projected increased livestock use would consume additional available forage (up to 50% utilization). A 50% utilization of available forage may not affect the ecological condition of native vegetation communities, however, it would result in reduced plant height. Depending upon species, 50% utilization (by weight) can mean the reduction of up to 80% of the plants height. This reduced plant height would increase the grazed appearance of the Oregon plateau and make it appear somewhat less natural.

In Nevada, continuation of grazing systems with similar levels of utilization and no prescribed burning or seeding would not affect existing naturalness.

The El Paso corridor in Idaho and Nevada would be 1/4 mile to 3/4 miles wide along the existing El Paso gas pipeline. This pipeline is buried except where it is suspended across the Garat Gorge on the East Fork Owyhee River. The buried pipeline has a 25 foot wide right-of-way which was fully disturbed during the laying of the pipe and the subsequent establishment of a maintenance road paralleling the pipe. Construction is projected for an additional buried pipeline 50 feet to the west of the existing pipeline, except at the river crossing where the pipeline would be constructed immediately adjacent to the existing pipeline. The additional pipeline would have a constructed and maintained road along its west side, except at the river crossings where existing roads would be maintained. The additional pipeline right-of-way is also projected to have a 25 foot wide disturbance resulting in a total soil surface disturbance area within three WSAs of about 25 acres.

In WSA NV-010-103A the plateau, and to a much lesser extent the canyonlands, topography slopes sharply downward toward the El Paso pipeline, thereby making the existing disturbance substantially noticeable over 2,662 acres in the WSA's southern periphery. The addition of another 25 foot wide disturbance plus the widening (12 feet more) of the pipeline disturbance across the South Fork Owyhee River Canyon would further reduce naturalness on 2,662 acres.

Development of the El Paso Corridor in WSA NV-101-103A would impact naturalness on about 320 acres of canyon and plateau lands in the northern periphery of adjacent WSA NV-101-106. The existing disturbance from burying the El Paso gas pipeline in the canyon slopes lying between the two WSAs is substantially noticeable over the 320 acres. The disturbance from placing an additional pipeline would also be noticeable and would further reduce naturalness in the northern periphery of WSA NV-010-106.

In WSAs ID-16-49D and ID-111-49E, the existing pipeline is generally unnoticeable because the lands slope gently downward away from the pipeline. Only on a small area of about 100 acres on the southeast side and top of Windy Point Butte, in the southeast corner of WSA ID-16-49D, is naturalness reduced by views of the pipeline. Placement of the additional pipeline would further reduce naturalness in the Windy Point area and on about eight additional acres along the remainder of the two WSAs' southeast peripheries.

Development of the pipeline in WSA ID-16-49D would impact the naturalness of the canyon and some of the plateau in the northwest periphery of adjacent WSA ID-16-52. The existing pipeline is visible over about 200 acres of the East Fork Owyhee River canyon and adjacent plateau rimrock areas. The additional pipeline would be buried or suspended immediately adjacent to the existing pipeline (25 feet instead of 50 feet) within the canyon, and the existing 25-foot wide disturbance would be widened by about 12 feet. During construction of the additional pipeline, the existing disturbed area would be rehabilitated (recontoured and seeded), and although the total disturbed area

would be 12 feet wider, the existing disturbance would be less noticeable following rehabilitation. Suspending another pipe across the river canyon would not noticeably add to the reduced naturalness caused by the existing suspended pipe. Consequently, reductions to naturalness in WSA ID-16-52 are projected to be moderate on 200 acres.

In total, placement of an additional pipeline adjacent to the existing El Paso gas pipeline would moderately to severely reduce naturalness on 3,290 nonsuitable acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106.

The Twelve Mile corridor in Nevada (WSA NV-010-106) would be a five mile wide corridor which would extend from Twelve Mile southward to the WSA's southern boundary at the "YP" Ranch. It is projected that two high voltage powerline systems would traverse southwest-northeastward through the corridor, paralleling each other at a distance of one mile. It is estimated that at least 27 towers would be placed in the WSA at a distance of about 1,300 feet apart. Twenty-seven towers 150 feet high and 90 feet wide would be substantially visible over the entire nonsuitable southern plateau area (7,150 acres) of the WSA. In addition, about 200 acres of canyonlands in the southern portion of the WSA would be visually impacted by towers standing adjacent to the rimrock and by powerlines, with brightly colored warning balls, stretching across the sky above the canyon walls. The visual presence of these powerline systems would substantially reduce naturalness on 7,350 acres of plateau and canyon.

Exploration activities for oil and gas resources are projected to occur on WSA lands recommended nonsuitable for wilderness designation. It is projected that three oil/gas explorational drilling sites would be established in Oregon and Idaho (one each in WSAs OR-3-195, ID-16-48C and ID-16-49A). It is also projected that "thumper" trucks would be used in three to five mile square grids for seismic testing of underlying rock strata. Establishment of each drill site would result in a ten-acre clearing of topsoil and vegetation for the placement of a 150 foot high drilling rig, metal storage sheds, a one-acre mud pond and miscellaneous drilling materials/equipment. Drill sites would be accessed by ways up to 1.3 miles in length. Because of the height of the drill rigs and size of associated buildings, the drill sites would be highly visible over large acreages of the plateau. In WSA OR-3-195, the drill site would be obvious from at least 3,200 acres in the southeast portion of the WSA; in WSA ID-16-48C, the drill site would be obvious from 5,400 acres in the northwest portion of the WSA; in WSA ID-16-49A, the drill site would be obvious from at least 4,700 acres in the south-central portion of the WSA. Within the three WSAs, naturalness would be reduced on a total of 13,300 nonsuitable acres. All but 1,300 acres (in WSA OR-3-195) of these 13,300 acres would also have a loss of naturalness due to drill seedings. The tall, vertical forms of the drill sites silhouetted against the horizon would contrast sharply with the relatively flat natural terrain on the plateau. The drill sites would be visible from additional nonsuitable acreage, however, adverse impacts on these acreages are expected to be minimal. Once exploratory operations are completed, rehabilitation of the sites and their access ways, including replacement of topsoil and/or seeding grass and shrub vegetation on the drill pads and

access ways, would render the drill sites to a substantially natural condition within three to five years. Complete restoration would be expected to occur within 20 years.

Thumper truck grids would produce moderate amounts of sagebrush crushing in paralleling grids every three to four miles across plateau lands. Sagebrush crushing would be noticeable for a period of five years in close proximity to the grid lines, but would not be substantially noticeable on the lands as a whole nor in the long term.

Within WSA OR-3-195, 14 prospecting sites of one acre each are projected on the plateau adjacent to the Owyhee River Canyon and Louse Canyon-Toppin Canyon complex in Oregon. Naturalness would be impacted on about 7,500 acres from twelve sites projected to be located in the Louse Canyon-Toppin Canyon complex and on an additional 300 acres associated with two isolated mining prospects below Three Forks along the Owyhee River Canyon. Following completion of prospecting activities, soil and vegetation in the rugged rimrock areas affected by most of the prospects is not projected to be readily restored by required rehabilitation work. Steep slopes would not likely permit complete restoration of original slope angles at many of the sites. Heavy metal soil/rock deposits uncovered during prospecting could hinder revegetation of the area. The limited opportunity for complete restoration of prospect sites would cause the naturalness in this area to be reduced for well beyond 20 years. The disturbance and access roads associated with the prospects would be readily seen over a large area. Even though only 14 acres of actual disturbance would occur, a total of 7,800 acres in the Louse-Toppin-Owyhee River Canyon complex are projected to have naturalness substantially reduced because of the topographic features where the prospects would be located.

Conclusion

In the suitable area, naturalness would be slightly enhanced over the long term, along six miles of road/way closures in the canyons. Naturalness on 120 acres would be permanently reduced from pipeline development visible on nonsuitable lands within the El Paso corridor.

In the nonsuitable area, naturalness would be permanently reduced on 415 acres from new reservoir and fence construction. Naturalness would be reduced for over 20 years on 35,090 acres from vegetation treatments (burning and seeding). Some of this acreage (12,000 acres), plus an additional 1,300 acres (13,300 acres total) would have naturalness reduced for up to one year while oil/gas exploration drilling rigs are operating. Naturalness would be permanently reduced on 3,290 acres from pipelines and on 7,350 acres from powerlines. Naturalness would be substantially reduced on 7,800 acres for well beyond 20 years from mineral exploration.

TABLE IV-11
ADVERSE IMPACTS TO NATURALNESS - CANYONLANDS WILDERNESS ALTERNATIVE

W S A	SUITABLE AREA					NONSUITABLE AREA					WSA TOTAL				
	VEG. TRT.	UTILITY	MIN.	ENERGY	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL
OR-3-195 (ID-16-48B)	0	0	0	0	0	2,900	0	7,800	1,300 (1,900)	12,000	2,900	0	7,800	1,300 (1,900)	12,000
ID-16-48C	0	0	0	0	0	16,140	0	0	1,900 (3,500)	18,040	16,140	0	0	1,900 (3,500)	18,040
ID-16-49A	0	0	0	0	0	3,440	0	0	1,900 (2,800)	5,340	3,440	0	0	1,900 (2,800)	5,340
ID-16-49D	0	0	0	0	0	200	103	0	0	303	200	103	0	0	303
ID-111-49E	0	0	0	0	0	0	5	0	0	5	0	5	0	0	5
ID-16-52	0	120	0	0	120	1,360	200	0	0	1,560	1,360	320	0	0	1,680
ID-16-53 (NV-010-103A)	0	0	0	0	0	11,050	2,662	0	0	13,712	11,050	2,662	0	0	13,712
NV-010-106	0	0	0	0	0	0	7,670	0	0	7,670	0	7,670	0	0	7,670
TOTALS 1/	0	120	0	0	120	35,090	10,640	7,800	5,100	58,630	35,090	10,760	7,800	5,100	58,750

1/ Acreage does not include areas of small localized impact caused by reservoir or fence construction, "45" dam maintenance, boating launch site development, road/way development or recreation use.

2/ Parentheses () around energy numbers indicate acreages also affected by vegetative treatments. Energy acreages are not included in totals to prevent double counting.

Solitude Opportunities

Suitable Area

Acquisition of 7,530 acres of non-federal lands would ensure that these lands, particularly private lands (1,720 acres) within the river canyons, are not developed or used for activities which could reduce solitude on adjoining WSA lands. Currently all of these lands are used for livestock grazing and occasional recreation. Wilderness designation, and its accompanying notoriety, could result in one or more of the private land parcels in the river canyons (all of which are accessed by roads) being developed as a commercially operated, recreation oriented lodge or resort if the lands are not acquired. Such development could substantially reduce solitude opportunities on a localized basis as human activity increases. Since these lands would be acquired and development would be precluded, opportunities for solitude would not be affected.

River running recreation use is projected to reach 11,000 user days per year (Table IV-2). This use is expected to occur during an optimum 45-day float period sometime between April 1 and June 30 of each year depending upon climate and river flow conditions. The use would occur from 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks. On an average, this amount of use would equate to one trip starting on the East Fork every two days and on the South Fork about once or twice per day. In a good water year, currently the East Fork gets five trips per year (one launch every nine days); the South Fork gets ten trips (one launch every five days), the main stem Owyhee River gets 35 trips (one launch every one to two days). This

change in launch frequency over 20 years would be a 500% to 1000% increase in the potential for recreation user group interaction. Because the rate of travel for each float party would be the same for the East Fork and South Fork, those groups starting from the upper river launch sites (WSA ID-16-49/52 and NV-010-106) would generally not encounter each other while floating on the two forks of the river. Float group interaction would generally begin on the Owyhee River in WSA ID-16-48B below the confluence of the East-South Forks where boating parties merge together. Presently, the merging of float trips on the Owyhee River results in less than one interaction between parties between the confluence and the Three Forks take-out/put-in. In 20 years, the expected group interaction would increase to five or more on this section of river. Below Three Forks in WSA OR-3-195, a launch schedule of four trips per day would raise group interaction rates from a current rate of less than one per day to four or more per day. Such increases in float group interaction would cause a notable loss in opportunities for solitude.

Backpacking use is projected to reach 672 user days annually in canyonlands and associated plateau rimrock areas. About 50% of the backpacking use would occur in the spring when river running activities are also occurring. The remainder of the backpacking use would occur during the fall. Presently, little or no interaction between boaters and hikers occurs due to the minimal amount of use and the fact that backpacking primarily occurs in tributary canyons such as Deep Creek, Battle Creek and Louse Canyon. In 20 years, it is projected that backpacking use would remain largely in tributary canyons. Backpacking/boating group interaction in the river canyons should remain at less than one per trip in the East Fork, South Fork and main stem Owyhee River system, therefore, backpacking use would minimally contribute to reductions in solitude opportunities.

When boaters and backpackers travel the river launch site access roads to reach the canyon areas, they will interact with those engaging in other primitive recreation or semi-primitive recreation experiences (mostly sightseeing in the spring, and mostly hunting in the fall). Semi-primitive recreation use is projected to reach 785 user days in 20 years. The combined activities of the boaters/sightseers or backpackers/hunters, etc. at the river launch sites would produce almost daily use of these sites and cause a localized reduction in solitude opportunities at these sites. Construction of minimal recreation facilities at two launch sites (toilets and kiosks) would not contribute to increases in recreation use. The facilities would mitigate public health and safety concerns generated by increased recreation use.

Six miles of roads and ways would be closed to motorized recreation use within the canyons. These closures would slightly increase solitude opportunities in the canyons by eliminating motorized recreation use in these areas. Recreationists would benefit from the road closures since most primitive recreation activities would be occurring in close proximity to the canyon rimrocks in the vicinity of the closed vehicle routes.

There would be no rangeland management actions in the suitable area which would impact opportunities for solitude.

Environmental Consequences

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor. Opportunities for solitude on lands adjoining the utility corridors would be temporarily (1.5 months) reduced on 120 acres in WSA ID-16-52 due to human activity while construction is occurring. Once construction is completed, occasional use on the utility maintenance roads or ways for motorized recreation and facility maintenance would have no impact on opportunities for solitude.

There would be no mineral or energy exploration actions in the suitable area that would impact opportunities for solitude.

Nonsuitable Area

Acquisition of 19,210 acres of Idaho state lands would have no impact on solitude opportunities. These lands would continue to receive only occasional human activity associated with livestock grazing and semi-primitive motorized recreation use. Other non-federal land acquisition includes a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106. Following easement acquisition, management actions include constructing minimal recreation facilities (toilet and kiosk) and improving road access to make the area a boating launch site. Acquisition would also prevent potential commercial lodge development which would maintain existing solitude opportunities.

The launch site (road improvement, toilet and kiosk) at Twelve Mile in WSA NV-010-106 would be built on private lands under the authority of a recreation easement. Development of this new launch site would help disperse river recreation use along the upper South Fork Owyhee River in WSA NV-010-106 and ID-16-53(NV-010-103A), and enhance solitude opportunities in this area.

Land-based recreation is projected to reach 50 annual user days of backpacking use along the South Fork Owyhee River Canyon and rimrock area, 398 backpacker user days in other rimrock areas and 2,355 user days of semi-primitive motorized recreation use (principally hunting and some sightseeing) on the plateau where existing roads/ways would remain open for motorized use. This level of recreation use (124% increase) would not noticeably contribute to a reduction in solitude opportunities, even in the South Fork Owyhee River Canyon where river recreation is occurring.

Rangeland management actions would have no increased impact on solitude opportunities. The amount of human activity associated with construction and maintenance of fences and reservoirs, vegetative manipulation, and day-to-day grazing system management is not expected to change enough to affect current opportunities for solitude.

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor. Opportunities for solitude within the corridors would be temporarily (1.5 months) reduced during the construction period on 3,290 acres of the El Paso corridor in WSAs ID-16-49D,

ID-111-49E, ID-16-52, NV-010-103A and NV-010-106 and on 3,675 acres of the Twelve Mile corridor in WSA NV-010-106. Once construction is completed, occasional vehicle use on the two new ways developed along the Twelve Mile corridor powerlines in the southern portion of WSA NV-010-106 would slightly reduce solitude opportunities, principally during fall hunting. Though the El Paso corridor pipeline construction would result in a new road, it would immediately parallel an existing maintenance road. The new road would offer an alternative travel route in a currently traveled area rather than a new route in an untraveled area. Therefore, the new pipeline is not projected to result in increased motor vehicle use or in loss of solitude opportunities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. Human activity at the exploratory drill rig sites would be seen and heard over about 13,300 acres in the three WSAs for a period of nine to twelve months. This exploration activity would reduce solitude opportunities during the period of operation. Following completion of exploration activities, solitude opportunities would return to pre-exploration conditions.

About 7,800 acres of plateau lands in WSA OR-3-195 in the vicinity of the confluence of the Owyhee River and Louse Canyon and below Three Forks would be affected by 14 mining prospects and related access ways. Human activity would reduce solitude opportunities in this area during the period that prospecting is active (up to one year). Following completion of prospecting activities, solitude opportunities would return to pre-prospecting conditions.

Conclusion

On suitable lands, a slight increase in solitude opportunities would occur in the canyons as a result of closing six miles of roads and ways to motorized recreation. Notable localized reductions in solitude opportunities are projected in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to increased float group interactions. Localized reduction in solitude opportunities are projected at the boating launch sites where vehicle access along maintained roads would concentrate recreation use and cause frequent interaction between visitors. Short-term (1.5 month) reductions in solitude opportunities are projected on 120 suitable acres in WSA ID-16-52 during pipeline construction on adjoining nonsuitable lands along the El Paso corridor.

On nonsuitable lands, a temporary (1.5 months) reduction in solitude opportunities would occur on a total of 3,290 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106 during pipeline construction along the El Paso corridor. An additional 3,675 acres in WSA NV-010-106 would have solitude opportunities temporarily (1.5 months) reduced during powerline construction in the Twelve Mile corridor. A slight reduction in solitude opportunities would continue in this WSA as semi-primitive motorized recreation use occurs along vehicle routes established during powerline construction. Another 13,300 acres of nonsuitable lands in WSAs OR-3-195, ID-16-48C and ID-16-49A would have solitude opportunities temporarily reduced

(nine to twelve months) during oil and gas exploratory drilling activities. About 7,800 acres in WSA OR-3-195 would have reduced solitude opportunities for up to one year during mineral prospecting activities.

Primitive Recreation Opportunities

Outstanding primitive recreation experiences exist only on those lands which contain a high degree of naturalness and offer a high degree of solitude opportunities. Changes in either the degree of naturalness or solitude opportunities change primitive recreation opportunities. In the Owyhee Canyonlands WSA complex, opportunities for primitive recreation experiences would change on the same acreage where changes in naturalness or solitude opportunities occur. Naturalness and solitude opportunity impact areas generally coincide with each other except in the canyon areas where solitude impacts occur from recreation user group interaction.

Suitable Area

Acquisition of 7,530 acres of non-federal lands would enhance opportunities for primitive recreation by ensuring that these lands remain natural in character and are not eventually developed with conflicting uses which could reduce opportunities for solitude.

In the canyon areas, a slight localized reduction in primitive recreation opportunities would accompany reductions in solitude opportunities caused by increases in boating group interaction along the Owyhee River in WSA OR-3-195 (ID-16-48B), and by increased interaction between boaters and others who use the maintained roads into the various boating launch sites.

Maintenance of the "45" Dam would allow the existing localized loss of naturalness in the South Fork Owyhee Canyon at the northern edge of WSA ID-16-53 to continue. This loss of naturalness locally reduces existing primitive recreation opportunities because river runners must scout and run or line/portage an unnatural structure which blocks the otherwise free-flowing river system. Therefore, maintenance of the "45" Dam would not impact the existing level of primitive recreation opportunities.

Stabilization of historic sites (stone buildings and wood cabins) along the river would benefit primitive recreation opportunities by ensuring the continued enjoyment of viewing these structures for their cultural value. Though not natural in character, they stand as examples of how civilization has come and gone from the Owyhee Canyonlands and heighten the sense of harsh conditions and challenge associated with traveling and living in the area.

In some canyon areas, primitive recreation opportunities would be enhanced slightly over the long term as enhanced naturalness (revegetated wheel tracks) and increased solitude opportunities (elimination of motorized recreation) occur from the closure of six miles of roads and ways.

There would be no rangeland management actions in the suitable area that would impact opportunities for primitive recreation.

Development of the El Paso corridor for buried pipelines, though occurring on nonsuitable lands, would be visible from about 120 acres of suitable lands in WSA ID-16-52. The visual evidence of the pipeline (contrasting vegetation) would cause these lands to be less natural in character over the long term. This loss of naturalness would also permanently reduce primitive recreation opportunities on the 120 suitable acres. Losses in solitude opportunities would occur only during the construction period (1.5 months).

There would be no mineral or energy exploration actions in the suitable area that would impact opportunities for primitive recreation.

Nonsuitable Area

Acquisition of 19,210 acres of Idaho state lands would have no impact on the primitive recreation opportunities since recreation activities would be allowed to continue. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would prevent potential conflicting uses and maintain naturalness and solitude opportunities which would enhance primitive recreation opportunities.

Construction of a boating launch site (improved road access, toilet and kiosk) at Twelve Mile in WSA NV-010-106 under the authority of a recreation easement would facilitate the dispersion of primitive recreation use on the upper South Fork Owyhee River; thereby enhancing primitive recreation opportunities through improved solitude opportunities.

Construction of nine reservoirs and nine miles of fence in WSA OR-3-195, three reservoirs in WSA ID-16-48B and one reservoir in WSA ID-16-48C would cause localized reductions in naturalness on 415 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area. On the nonsuitable plateau, 35,090 acres would have primitive recreation opportunities reduced because of losses in naturalness due to the cultivated appearance associated with mechanical drill seeding in native vegetative communities.

Development of the El Paso and Twelve Mile corridors for buried pipelines or overhead powerlines would reduce primitive recreation opportunities. In WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A, and NV-010-106, 3,290 acres in the El Paso corridor would have primitive recreation opportunities moderately to severely reduced because of a loss of naturalness caused by the visual presence of another pipeline disturbance. Solitude losses would be temporary (1.5 months) during facility construction. Development of powerlines in the Twelve Mile corridor within WSA NV-010-106 would also moderately to severely reduce primitive recreation opportunities over 7,350 acres because of the loss of naturalness caused by the persistent views of the powerlines coupled with a slight loss in solitude opportunities due to some use of powerline access ways for motorized recreation activities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. This activity would be visible over 13,300 acres of

surrounding nonsuitable lands, resulting in a temporary (nine to twelve month) loss of primitive recreation opportunities due to losses in naturalness and solitude opportunities.

The use of "thumper" trucks to do seismic testing on a grid pattern across plateau lands would also cause some reduction in primitive recreation opportunities for a period of five years as the naturalness of native vegetation recovers from vehicle track damage.

A temporary (less than one year) loss of solitude opportunities and a loss of naturalness for more than 20 years would occur over 7,800 acres in WSA OR-3-195 as a result of mineral prospecting. This loss of naturalness and solitude opportunities would result in a reduction in primitive recreation opportunities for more than 20 years.

Conclusion

Primitive recreation opportunities on suitable lands would generally be retained as a whole. A slight enhancement in primitive recreation opportunities would occur in some canyon areas as a result of closing six miles of roads and ways to motorized recreation use. Some localized reduction in primitive recreation opportunities would occur in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to projected increases in river boating use. Localized reductions in primitive recreation opportunities would also occur at boating launch sites where vehicle access along maintained roads would concentrate recreation use. Suitable lands totalling 120 acres in WSA ID-16-52 would have primitive recreation opportunities permanently reduced from new pipeline construction on adjoining nonsuitable lands in the El Paso corridor.

On nonsuitable lands permanent reductions in primitive recreation opportunities would occur on 3,290 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A, and NV-010-106 from construction of a new pipeline in the El Paso corridor. Another 7,350 acres would have primitive recreation opportunities permanently reduced by powerline construction in the Twelve Mile corridor in WSA NV-010-106. About 35,090 acres of nonsuitable plateau would have primitive recreation opportunities reduced for over 20 years by mechanical drill seeding in native vegetation communities. Construction of 13 new reservoirs and nine miles of fence would locally reduce primitive recreation opportunities on a total of 415 acres. Losses in primitive recreation opportunities would occur for a period of nine to twelve months on a total of 13,300 nonsuitable acres within WSAs OR-3-195, ID-16-48C and ID-16-49A while oil and gas exploration activities are occurring and for over 20 years on 7,800 acres in WSA OR-3-195 from mineral prospecting.

Special Features (Bighorn Sheep)

Suitable Area

Acquisition of land along the Owyhee River, Battle Creek and Deep Creek would enhance management and protection of bighorn sheep. Acquisition would ensure that potential resource uses on these lands would not adversely impact bighorn sheep in adjoining suitable areas.

It is projected that in 20 years river boating use would reach 11,000 user days annually (a 500% increase over present levels). Use on the East Fork Owyhee River would increase from an average of one trip every eight days to one trip every two days during the peak boating period. During the same period, the South Fork would increase to nearly two trips every day. At Three Forks, use would increase to four trips a day. These increases in use would be very gradual, and bighorn sheep would be able to adjust to this increased use because the sheep would primarily be at the upper levels of the canyon walls and the boaters would be down on the river. Sheep were found to be curious of boaters along the Colorado River as long as boaters stayed in the boats (Manson and Summer 1980). Human activity at favorite "camp spots" along the river would cause temporary displacement of sheep in the vicinity of the camp spots while human activity is occurring, but this displacement would be minor and would not effect bighorn sheep populations over the long term.

Recreation user day projections for primitive and semi-primitive recreation activities other than whitewater boating would be about 4,260 user days annually within 20 years. Much of this use, including all 1,120 user days for backpacking/horsepacking and 50% or more of the hunting use (1,430 user days), would occur in association with canyon and plateau areas used by bighorn sheep. These recreation use levels could result in behavioral and/or physiological impacts to bighorn sheep. Studies by the U.S. Forest Service and California Department of Fish and Game (Light 1971, Graham 1971) have shown that human use of desert bighorn sheep habitat in excess of 500 visitor days (a visitor day being one 12 hour visit) can cause bighorn sheep to withdraw from their ranges. Another study of California bighorn sheep habitat in the Sierra Nevada Mountains (Dunaway1971) identified gaps between five bighorn sheep ranges corresponding to areas of high human use. Three of these ranges also suffered losses in population numbers after major increases in recreation use, while the populations in the other two ranges not exposed to surges in recreational use remained stable.

The tolerance of human activity by bighorn sheep can vary dramatically from one population to another. This variation depends upon many factors including the duration, frequency, location, season and nature of the disturbance and past experiences of the population and the individual mature sheep, particularly the herd leader. In the case of the Owyhee Canyonlands WSAs, the timing, location and frequency of recreation use are all of major concern. Over 50% of the projected backpacking/horsepacking use is expected to occur during the cooler, moist spring months during the bighorn lambing period when they are especially sensitive to disturbance. All of the hunting use would occur in the fall months in conjunction with backpacking and

horsepacking use. Unlike the projected river boating use, much of the backpacking/horsepacking and hunting use would be located along the canyon rimrocks and in the major tributary canyons at or above the same topographical level where the bighorn sheep population normally resides. This topographic interrelationship between recreation users and bighorn sheep has been observed to cause greater distress than if recreation activities, such as boating, are confined to areas below the bighorns (Manson and Summer 1980). Consequently, projected backpacking/horsepacking and hunting use, combined with boating use, could cause disturbance to bighorn sheep populations. This disturbance would result in displacement of portions of the population into canyon areas to the north of the WSA complex unless the bighorn sheep are able to slowly adjust to human activity as recreation use increases.

Closure of six miles of roads and ways would limit access in the canyons. The closures would reduce human activity and vehicle noise in the interior of the suitable area. Since public access to the river system would be restricted to only a few spots, disturbance would be localized, resulting in reduced human disturbance to bighorn populations in the canyons. Since human activity would be reduced, stress on the animals would also be reduced.

Since state wildlife management agencies would continue wildlife population management practices, California bighorn sheep populations are projected to grow and serve as a source for transplants to other areas. Use of helicopters for trapping and transplanting bighorn sheep would continue to support establishment and expansion of the population. Maintenance of existing road networks between and adjacent to the WSAs would allow vehicle access for state game agencies to carry out transplanting programs.

Based on current population estimates, projected recreation increases, available habitat, new reservoirs and improvements in range conditions, bighorn sheep populations are projected to reach 900-1,200 animals in 20 years, a 300% increase over present levels.

Nonsuitable Area

Prescribed burning would be beneficial to bighorn sheep, especially where areas are burned within two miles of the canyon rims. The burns would open up dense sagebrush stands and allow native grasses and forbs (Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox) to increase. This improved range condition on the plateau would increase forage availability and improve overall habitat conditions (forage/cover ratio) for bighorn sheep.

Construction of new reservoirs would improve bighorn habitat and their distribution. Although reservoirs near the canyon would be 1/2 to 1 mile from the canyon rims, they would still improve distribution for bighorn as well as livestock. These reservoirs will allow for more even utilization of the forage by both livestock and bighorns on the plateaus.

Human activity associated with pipeline construction near the canyon in WSAs ID-16-49D and ID-16-52 (El Paso corridor) would cause localized disturbance and short-term displacement (1.5 months) of sheep adjacent to the pipeline corridor but would not affect population numbers.

Human activity associated with mineral prospecting (19 sites) in WSA OR-3-195 would cause localized disturbance and short term displacement (up to one year) of bighorn sheep during prospecting activities but would not affect population numbers.

Conclusion

In the suitable area, land acquisition along the Owyhee River, Battle Creek and Deep Creek would ensure that bighorn sheep in adjacent areas are not adversely impacted. Road and way closures would decrease disturbances to bighorn sheep populations in the canyons. Increased recreation use could disturb bighorn sheep populations and cause displacement over the long term. On nonsuitable lands, pipeline construction across the canyon in WSAs ID-16-49D and ID-16-52 would cause short-term displacement of bighorn sheep. Mineral prospecting in WSA OR-3-195 would also cause short-term displacement. Within the WSA complex, bighorn sheep populations are projected to expand into available unoccupied habitat. The population projection over the next 20 years is 900 - 1,200 animals.

Special Features (Cultural Values)

Suitable Area

Closure of six miles of roads and ways to motorized recreation use would reduce the current adverse impacts to cultural resources by reducing motorized access to sites now subject to acts of vandalism and theft.

The projected 20 year boating use levels of 11,000 user days annually would mean that prehistoric lithic scatters, multi-functional campsites, rockshelters and rock art sites sites within the river canyons would be visited by parties of up to 15 people on an average of once every two days on the East Fork of the Owyhee River; twice a day on the South Fork; and four times a day below Three Forks during the peak use period of April 1 through June 30. While public education and information efforts would discourage most people from acts of vandalism and theft, the number of such acts would likely increase as visitor use rises over the next 20 years.

Land acquisition actions would have a beneficial impact on cultural resources. Five significant historic site complexes located in the river canyons would be acquired. These sites are important not only for their scientific research potential but for the outstanding recreational/aesthetic values they possess. Acquisition of private lands removes the possibility that sites on those lands would be disturbed or destroyed as a result of commercial recreational development.

Environmental Consequences

Stabilization of 8 historic structures within the river canyons (5 on private lands, 3 on BLM lands), would have a substantial beneficial impact on cultural resources by reducing the current deterioration of significant properties, enhancing the aesthetic qualities of the area for visitors, and preserving scientific information on historic settlement patterns and lifeways for future study.

Within suitable areas, livestock use would remain at approximately current levels, but redistribution of livestock following implementation of grazing systems would disperse livestock over a broader area and slightly reduce livestock trampling of cultural resources.

Construction of recreational facilities (toilets, kiosks and signs) are actions which have potential to disturb or destroy cultural resources which lie within their immediate impact areas. Should a significant site be discovered during any of these actions, potential impacts would be mitigated in advance of project construction after consultation with the State Historic Preservation Officer. Appropriate mitigating measures might include avoidance of a site by relocating or not authorizing a project, modification of a project to eliminate impacts, test or salvage excavation of endangered portions of a site, or merely recording a site. Once mitigation has been determined, project implementation is normally considered to have no impact on cultural resources.

Nonsuitable Area

Improving the road through private land at Twelve Mile would allow for a moderate localized increase in theft and vandalism of cultural resources in a formerly little-visited area. Acquisition of a 280 acre recreation easement at Twelve Mile would benefit cultural resources by removing the possibility that sites within the easement would be disturbed or destroyed as a result of commercial recreational development. Acquisition of this easement would also allow BLM to reduce deterioration of historic structures at Twelve Mile through stabilization and protection.

Livestock use on nonsuitable areas would rise approximately 42% overall and increased damages to cultural resources as a result of increased trampling and related erosion would be significant. This increase in trampling damage would be slightly moderated by implementing grazing systems which would redistribute impacts over a broader area.

Moderately increased localized levels of vandalism and theft of cultural resources would occur as a result of development of new vehicle ways (access roads) associated with the new powerlines in the vicinity of Twelve Mile in Nevada. Slight short-term (nine to twelve months) localized increased vandalism and theft of cultural resources would also occur in the vicinity of the access roads to three oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting sites in Oregon.

Vegetative manipulation (burning and plowing and seeding with rangeland drills), installation of range improvements (reservoir and fence

construction), and construction of a pipeline adjacent to the existing El Paso Gas Pipeline are all actions which have potential to disturb or destroy cultural resources. However, all of these actions would be satisfactorily mitigated through normal compliance procedures and therefore would have no impact on cultural resources.

Conclusion

Within the suitable area, vandalism and theft of cultural resources would be reduced by road and way closures. Increases in boating use would lead to increased levels of vandalism and theft in the river canyon areas over time. Acquisition of private lands containing five historic sites, and stabilization and protection of structures at those sites plus three sites on BLM lands would reduce the deterioration of significant resources and enhance the recreational/aesthetic experience for river users. Livestock would be distributed over a broader area and trampling of sites would be reduced slightly.

In the nonsuitable area, acquisition of a 280 acre recreation easement at Twelve Mile would allow protection of a significant historic site. Increased livestock use would significantly increase trampling damage. Moderate localized increases in vandalism and theft at cultural sites would occur as a result of road improvement through private land at Twelve Mile in Nevada and as result of new access roads associated with powerline development in Nevada. Slight short-term (nine to twelve months) localized increases in vandalism and theft would occur in the vicinity of the access roads to the oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting sites in Oregon.

IMPACTS TO THE CONDITION AND AMOUNT OF NATIVE VEGETATION

Suitable Area

Several sensitive plant sites would come under federal jurisdiction and protection as a result of land acquisition or exchange actions. Hedgehog cactus (Echinocactus simponsi), Inch-High Lupine (Lupine uncialus) and Bailey's Ivesia (Ivesia baileyi) are known to occur on state and private lands that are proposed for acquisition or exchange. There would be no impacts to these species from wilderness designation since there are no management actions which would affect these plants.

Development and use of two boating launch sites would impact vegetation in the canyons. Vegetation would be removed during construction of toilets and kiosks at these sites. Increases in recreation use would increase trampling and result in the establishment of trails and tent pads in the vicinity of the sites. Vegetative cover in the vicinity of the two launch sites would be lost over the long term on a total of five acres.

Increased recreation use would affect vegetation along two sections of river canyons; the upper South Fork Owyhee River in WSA NV-010-106 and the middle section of the Owyhee River in WSA OR-3-195. In these river sections,

increased boating use combined with limited campsite availability would result in trampling and loss of vegetative cover on a total of five acres at the campsites.

Maintenance of the irrigation dam servicing the "45" Ranch on the South Fork Owyhee River would result in minimal disturbance. The established road would be used to move any needed equipment to the site. A small area of less than two acres has been set aside to provide fill for dam maintenance and vegetation at this site would be lost.

Improved grazing systems would allow an increase in the abundance and vigor of grasses and forbs by controlling the season of use for livestock. Since livestock use would remain at approximately the same levels occurring at the time of designation and more forage would be available, grazing pressure would be reduced and overall livestock utilization of native plant communities would decrease in the long term. The increased abundance and vigor of grass and forb species would also reduce the susceptibility of areas to sagebrush encroachment. The ecological condition of native plant communities would generally improve with improved grazing systems. The current poor or fair ecological conditions on 11,925 acres of native plant communities in small areas of the canyons would improve. Canyon areas in good ecological condition (approximately 76,975 acres) would remain in stable condition (Table IV-12).

TABLE IV-12

IMPACTS TO ECOLOGICAL CONDITION OF NATIVE VEGETATION
FROM THE CANYONLANDS WILDERNESS ALTERNATIVE (BLM ACRES)

	Suitable Area		Nonsuitable Area		
	Ecological Condition		Ecological Condition		
WSA	Good Condition Retained	Poor/Fair Condition Improved	Good Condition Retained	Poor/Fair Condition Improved	Native Vegetation Displaced
OR-3-195	34,900	0	26,850	127,500	1,450
ID-16-48B	8,040	3,960	4,810	16,890	0
ID-16-48C	6,000	0	365	16,060	2,175
ID-16-49A	10,035	7,965	0	51,585	575
ID-16-49D	2,000	0	390	7,525	75
ID-111-49E	2,200	0	175	29,165	0
ID-16-52	3,200	0	1,070	8,705	175
ID-16-53	7,300	0	7,260	25,550	2,400
NV-010-103A	1,700	0	0	6,142	0
NV-010-106	1,600	0	1,200	19,075	0
TOTAL	76,975	11,925	42,120	308,197	6,850

The six miles of vehicle routes closed to motorized recreation would not have any vehicle traffic and would fully return to native species including sagebrush.

Nonsuitable Area

Prescribed burning would occur on 29,300 acres of big sagebrush sites across the nonsuitable plateau, about 15,600 acres within the Owyhee River Management Area (ORMA) and about 13,700 acres outside the ORMA. Following burning on the 29,300 acres, it is projected that about 50% of the burned areas outside the ORMA in Idaho would be seeded to non-native species. The grass/forb composition of the vegetation communities would increase and result in a vegetative mosaic of open grassy areas intermixed with areas containing various ages of low and big sagebrush. Therefore, about 6,850 acres of big sagebrush on the plateau would be displaced by non-native grass species, mostly on the Idaho WSA lands south of the Owyhee River and East Fork Owyhee River.

On untreated areas (both big and low sagebrush ecological sites) across the nonsuitable plateau, improved livestock grazing systems would redistribute livestock use and increase the abundance and vigor of native grasses (principally Idaho fescue and bluebunch wheatgrass) and forbs. The increased amount of native grasses and forbs, together with the increased non-native grasses following burning and seeding, would be available for livestock forage. Utilization levels of up to 50% (by weight) would be allowed and livestock use would increase 42%. The abundance and vigor of native grasses and forbs would increase similar to that described for the suitable area, but to a lesser degree because of increased livestock use in the nonsuitable area. Increases in the number of livestock using nonsuitable lands could result in slightly higher susceptibility to sagebrush encroachment than suitable areas where forage use is not increased. Within the nonsuitable areas, the current poor or fair ecological conditions of native plant communities on the plateau (about 308,197 acres) would improve. Plateau areas with crested wheatgrass or Siberia wheatgrass seedings would show an encroachment of sagebrush. Canyon and plateau areas in good ecological condition (approximately 42,120 acres) would remain in stable condition.

Construction of 13 new reservoirs in the nonsuitable area would result in the loss of 26 acres of native vegetation.

A new pipeline in the El Paso corridor would disturb a 25 foot wide strip about 8 miles long within WSAs ID-16-49D, ID-111-49E and NV-010-103A. The pipeline strip would be mechanically altered with half the acreage (eastern half) rehabilitated and returned to native species in a three to five year period with sagebrush canopy cover returning within 20 years. A regularly maintained dirt road would be constructed along the west side of the pipeline. The maintenance of the new pipeline road is expected to permanently remove 12 acres of native vegetation. Regular maintenance and inspection actions are expected to keep the roadway clear of vegetation.

Development of the Twelve Mile Corridor in WSA NV-010-106 projects two paralleling high voltage powerlines constructed approximately one mile apart. At least 27 towers would be constructed within the WSA complex. Approximately 15 acres of native vegetation would be disturbed or removed during construction of the towers. Vegetation would be permanently lost on 1 1/2 acres. Full vegetative recovery on 13 1/2 disturbed acres would occur in 20 years. No new roads would be built, but each powerline would have a vehicle way developed to facilitate line inspection and maintenance. Vegetation disturbance on these ways would be substantial during the construction period. Within five to ten years after powerline construction, native vegetation would reclaim these ways except in the wheel tracks where shrubs would not become reestablished.

Oil and gas exploration actions would impact native vegetation. Seismic testing with specialized vehicles would impact or "thump" the ground to obtain seismic readings. These vehicles would travel cross-country when necessary in a three to five mile wide grid pattern. Wheel tracks would remain behind, but vegetation would recover within three to five years depending on climatic conditions. Exploratory drillings would disturb a total of 30 acres of native vegetation at three sites in WSAs OR-3-195, ID-16-48C and ID-16-49A. The sites would remain disturbed for a period of nine months to one year. Following the completion of exploration activities, topsoil at the sites would be replaced and the disturbed areas seeded to native vegetation. Within five years all three sites would be rehabilitated with native vegetation, including the ways, with a mixture of grasses and shrubs. Complete restoration of the sagebrush canopy would take from ten to 20 years.

Mineral prospecting would eliminate a total of 14 acres of vegetation on 14 sites. The sites would be rehabilitated (recontoured and seeded) following prospecting. Reestablishment of vegetation would take up to 20 years.

Conclusion

In the suitable area, prescribed burning, maintenance of present livestock levels, and improved grazing systems would cause good condition native vegetation (76,975 acres) to remain stable and 11,925 acres of poor/fair condition native vegetation to improve. Native vegetation fully recover along six miles of roads/ways closed to motorized recreation use. Ten acres of vegetation would be lost at boating launch sites and along the upper South Fork Owyhee River and the middle section of the Owyhee River due to increased recreation use. Two acres of vegetation would be lost through the "45" Dam maintenance.

In the nonsuitable areas, poor/fair condition native vegetation (308,197 acres) would improve and good condition native vegetation (42,120 acres) would remain stable. Prescribed burning would occur on 29,300 acres of which 6,850 acres would be displaced by non-native species. Native vegetation would be permanently lost on approximately 12 acres of the total 25 acres disturbed by the establishment of a new pipeline/maintenance road within the El Paso corridor. Within the Twelve Mile corridor, 1 1/2 acres of native

vegetation would be permanently lost and 13 1/2 disturbed acres would recover in 20 years. Oil and gas exploration would displace a total of 30 acres, but rehabilitation of the disturbed sites would occur in five to 20 years. Mineral prospecting would disturb 14 acres with recovery projected within 20 years. Loss of 26 acres of vegetation would occur from construction of 13 reservoirs.

IMPACTS TO THE LEVEL OF SELECTED WILDLIFE POPULATIONS

Suitable Area

Acquisition of 7,530 acres of non-federal lands would enhance management and protection of mule deer, pronghorn, sage grouse and redband trout by preventing potential conflicting uses which could adversely impact these wildlife populations or their habitats.

Closure of six miles of roads and ways would reduce motorized recreation use and hunting pressure on mule deer, pronghorn and sage grouse. The road closures would also reduce human disturbance associated with motorized vehicles and stress on the animals would be reduced. Since public access would be restricted to only a few routes, disturbance and hunting pressure would primarily occur in these few areas. Mule deer in particular would benefit from closure of access routes which lead to the river. The closed vehicle routes would fully revegetate but overall wildlife habitat would not be measurably affected. Although disturbance and hunting pressure would be reduced, wildlife populations are not projected to change over the long term because of road closures.

Nonsuitable Area

Acquisition of 19,210 acres of non-federal lands (and a 280 acre recreation easement) would enhance management and protection of mule deer, pronghorn, redband trout and sage grouse by preventing potential conflicting uses which could adversely impact these wildlife populations and their habitats. Although management opportunities would be generally enhanced through acquisition, no specific wildlife habitat improvement projects are proposed and wildlife habitat is not projected to change substantially. Therefore, wildlife populations are not projected to increase solely because of acquisition.

Land treatment projects on 29,300 acres would improve forage and cover for mule deer, pronghorn and sage grouse populations as in the Proposed Action, suitable area. However, the increase in livestock use (12,159 AUMs) would lead to increased competition with wildlife for the additional forage created by burning and seeding. Construction of new rangeland facilities (13 reservoirs and nine miles of fence) would have the same impact to wildlife populations as described in the Proposed Action, suitable area. However, the increase in livestock numbers in the nonsuitable lands would increase competition with wildlife for the benefits derived from these projects. As a result of the improved habitat on 29,300 acres and an increase in competition

from increased livestock use, mule deer, pronghorn and sage grouse populations are projected to remain stable or decrease up to 10% in the nonsuitable area from rangeland management actions.

Construction of a pipeline in the El Paso corridor and a powerline in the Twelve Mile corridor would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse the same as in the Proposed Action. Pipeline and powerline construction would each last 1 1/2 months. Since habitat changes would be minimal, population levels would not be affected.

Oil and gas exploration activities on nonsuitable plateau lands would effect mule deer, pronghorn and sage grouse, the same as in the Proposed Action. Stipulations on oil and gas leases would minimize impacts by prohibiting activity during the times when mule deer, pronghorn and sage grouse populations are most sensitive to human activity. These times correspond to mule deer use on winter range, pronghorn use on winter and fawning ranges and sage grouse use on winter range, breeding grounds and nesting/brood rearing areas. The ten acre disturbed area associated with each of three exploration sites would be temporarily avoided by mule deer, pronghorn and sage grouse using the area. It would take between three to five years for the site to return to native vegetation cover and for wildlife populations to fully reinhabit the disturbed sites. This temporary and relatively small reduction of habitat would not affect population levels. Overall, wildlife population levels would not be impacted by oil and gas exploration activities.

Mineral prospecting at 14 sites in WSA OR-3-195 is projected to deposit fine sediments in the West Little Owyhee River (Louse Canyon). Sedimentation in the Owyhee River due to activities primarily outside the WSA is already adversely impacting fisheries in that river. Depending on the mining method used, it is projected that sedimentation in the West Little Owyhee River would increase by up to 25% due to mineral prospecting at 14 sites. This increase in sedimentation would have significant adverse impacts on the fisheries. Trout "redds" would become unusable because silt deposits would cover gravel and riffle areas used as spawning habitat. Sediment deposits would also reduce water depths, reduce rearing areas and hiding cover, increase water temperatures, and reduce oxygen availability. All of these impacts would adversely impact fish populations and reduce the galactic invertebrate populations which the fish populations depend on. Given this increase in sedimentation and the lack of flushing flows to remove sediments under low flow conditions, fish populations could be reduced by up to 50%. Heavy metal toxics leeched or released directly into the stream could reduce fish and invertebrates outright or could bioaccumulate and reduce fish and invertebrates over time.

Human activity associated with mineral prospecting at 14 sites would cause localized disturbance and displacement of mule deer, pronghorn and sage grouse for up to one year, but would not impact populations. Loss of vegetation at these sites would not impact wildlife populations.

Conclusion

In the suitable area, land acquisition would benefit mule deer, pronghorn, sage grouse and redband trout by eliminating potential resource conflicts. Road and way closures would reduce disturbance to wildlife populations in the canyons. Wildlife populations would remain stable in the suitable area.

Land acquisition of nonsuitable lands would benefit wildlife by eliminating potential resource conflicts. Utility corridor actions, oil and gas exploration and mineral prospecting on nonsuitable lands would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse inhabiting the impact area. Mineral prospecting in WSA OR-3-195 could cause up to a 50% reduction of fish populations in the West Little Owyhee River. Mule deer, pronghorn, and sage grouse populations would remain stable or decrease up to 10% as a result of rangeland management actions.

IMPACTS TO THE LEVEL OF SEMI-PRIMITIVE RECREATION

Suitable Area

Of the 7,530 acres of non-federal lands recommended for acquisition, 880 acres are private lands presently accessed by motor vehicles for semi-primitive recreation activities (principally vehicle camping, hunting, sightseeing and some fishing). Only the road to 160 acres of these private lands at Crutcher's Crossing (a boating launch site) between WSAs ID-16-48B and ID-16-49A would be maintained. The other lands have roads which would be closed to motorized recreation use, specifically the roads into Five Bar (WSA OR-3-195), Battle Creek confluence (WSAs ID-16-49A/ID-111-49E/ID-16-49D), and Coyote Hole (WSA ID-16-53).

There are a total of 13 miles of boundary roads separating the Owyhee Canyonlands WSAs. Within the WSAs are 38.4 miles of cherrystem roads and 114.3 miles of ways (two-wheel tracks). A wilderness designation would result in the closure of six miles (4%) of the roads and ways currently used for semi-primitive motorized recreation use which lead to the canyons (Table II-3 and IV-4). Recreation users dependent upon motor vehicle transportation would lose opportunities for semi-primitive activities.

Some motorized hunting activities would be displaced to adjacent areas because of road closures. Most big game hunters are projected to continue to pursue mule deer, pronghorn antelope, and bighorn sheep in the area, even if vehicle use is restricted. The big game road hunters would change to hunting on foot or horseback. Bird hunters would not tend to switch to foot or horseback. Some chukar hunting within the canyons would be reduced because of access restrictions to canyon areas. Overall, motorized hunting opportunities within the suitable area would be reduced slightly.

Rock hounds are highly dependent upon road access to sources of gem stones in the canyons. Eliminating some of the vehicle routes to canyon areas would slightly restrict collection opportunities.

Some people use the Owyhee Canyonlands area primarily for motorized sightseeing and vehicle camping. Some of the scenic overlooks and vehicle camping sites located within the canyon rimrocks at or near the end of cherrystem roads and ways would not be accessible to sightseers and campers by motorized vehicles because of road closures. However, vehicle routes into the canyons between the WSAs would remain open and continue to permit scenic views of the canyons and allow vehicle camping within the canyons. The established scenic overlook site along the northern neck of Oregon WSA OR-3-195 would remain open for vehicle access. All other undeveloped canyon rimrock overlook and camping sites in Oregon, Idaho and Nevada would remain accessible because existing WSA boundary roads reach to the canyon rims or within several hundred feet of the rims. Though some sites would be closed to motor vehicle access, sufficient sites would remain accessible to satisfy projected demand. Overall, semi-primitive motorized sightseeing and camping opportunities would be slightly reduced.

Closure of the suitable area to motor vehicle use would not have a notable impact upon recreationists who drive motor vehicles off of roads and ways. Off-road vehicle (ORV) opportunities in the WSAs are minimal because of natural terrain or surface structure limitations. Little ORV use currently exists except when necessary for hunting because of the ample availability of areas closer to population centers.

The Proposed Action calls for maintaining the major road access to the boating launch sites between the WSAs as well as providing some minimal facilities (toilets) at the sites. Semi-primitive motorized recreation use associated with these access roads would continue. The roads would provide opportunities for recreation users to reach the river canyons for hunting as well as allow some opportunity for sightseeing, rock hounding and vehicle camping.

Nonsuitable Area

Acquisition of non-federal lands would have no impact on the level of semi-primitive recreation use on nonsuitable lands other than a slight increase in semi-primitive motorized recreation opportunities resulting from acquisition of a recreation easement at Twelve Mile in WSA NV-010-106. This easement would allow for public access into the Twelve Mile boating launch site on private property.

Upgrading the access road into the boating launch site at Twelve Mile in WSA NV-010-106 and constructing toilets and kiosks at the site would increase motorized recreation opportunities by making the site easier to drive to and a more desirable destination.

Development of the Twelve Mile corridor would result in the establishment of vehicle tracks along two powerlines leading from the east and west boundaries of WSA NV-010-106 to the canyon rimrocks of the South Fork Owyhee River. These routes would provide hunters, rock hounds and sightseers with new recreation opportunities. Development of the El Paso corridor would result in a new pipeline and accompanying maintenance road in WSAs ID-16-49D,

ID-111-49E and NV-010-103A. However, this new road would be only 50 feet from the existing road along the El Paso Gas Pipeline and, therefore, would not increase recreation use or opportunities.

Oil and gas exploration activities would generate a number of miles of temporary two-track vehicle access routes in WSA OR-3-195, ID-16-48C and ID-16-49A which would be fully rehabilitated following exploration and not open to motorized recreation use.

Conclusion

In the suitable area, wilderness designation would result in the closure of six miles of vehicle routes on suitable lands. These closures would reduce semi-primitive motorized recreation opportunities in some canyon areas.

Within the nonsuitable area, maintenance of existing river access roads to boating launch sites between the WSAs would ensure continued use of these canyon areas. The addition of the Twelve Mile access road and river launch site on private lands in WSA NV-010-106 would slightly improve semi-primitive motorized recreation opportunities. Utility corridor development in Nevada WSA NV-010-106 would slightly increase semi-primitive motorized recreation opportunities.

Within 20 years, hunting is projected to reach 2,860 user days annually while use for other activities (sightseeing, rock hounding and vehicle camping) is projected to reach only 280 user days (Table IV-2).

IMPACTS TO THE LEVEL OF LIVESTOCK USE

Suitable Area

Maintenance of existing rangeland facilities would continue. Motorized vehicle use on six miles of roads and ways closed to motorized recreation would be controlled to allow for facility maintenance and construction, however, no use is projected on these routes. Salting, livestock monitoring and allotment supervision would be conducted by horseback. Livestock grazing would continue at approximately predesignation levels and there would be no increased livestock use within the suitable area.

Nonsuitable Area

Full use of motorized vehicles would be allowed for general livestock management and to maintain and construct rangeland facilities. Thirteen reservoirs and nine miles of fence would be constructed. Estimated livestock use within affected allotments would increase by 65,641 AUMs (230,319 AUMs to 295,960 AUMs) in 20 years. This would be a 29% increase over the current active preference for all allotments (Table IV-5). Estimated livestock use within the WSA boundaries would increase by 12,159 AUMs in 20 years (42% increase) and would occur only in nonsuitable areas (Table IV-6).

Conclusion

Motorized use would be restricted on six miles of roads and ways in suitable areas. Livestock use within the affected allotments would increase 65,641 AUMs (29%). Livestock use within the WSA boundaries would increase 12,159 AUMs (42%). No increased livestock use would occur in suitable areas. Thirteen reservoirs and nine miles of fence would be constructed in the nonsuitable area.

IMPACTS ON THE LEVEL OF SOIL EROSION

Suitable Area

There would be no management actions within the suitable area that would impact the level of soil erosion.

Nonsuitable Area

Rangeland burning with or without seeding is projected for 29,300 acres. The 2,930 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

The projected 42% increase in livestock use over a 20 year period would affect the broad based soil resource through reduction of vegetative cover and additional trampling resulting in increased erosion and compaction. Erosion would show the largest increase around livestock concentration areas and on steep hillsides. The areas most affected would be WSAs OR-3-195, ID-16-48C, ID-111-49E, ID-16-49A and ID-16-53. Improved grazing systems (including the proposed range improvement projects) would improve range condition which would tend to reduce soil erosion. The overall increase in livestock use would increase erosion rates by 10% to 12% (0.2 to 0.24 tons/acre/year) for the entire WSA complex.

Pipeline construction would cause short-term (one to two years) impacts consisting of compaction, mixing of soil layers, and loss of vegetative cover. The maintenance road to be constructed in association with the El Paso corridor would produce about 17.5 tons/year of soil loss.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 5B through 5D). Soil compaction and loss of vegetative cover would result from these operations. A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic to vegetation and act as a soil sterilant. Areas affected would be small (less than ten acres per site) and would rehabilitate in three to five years.

Mineral prospecting is projected in WSA OR-3-195 at 14 sites (Map 5A and 5B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and increase sediment loads into the West Fork Little Owyhee River (Louse Canyon). Toxic substances could be brought to the surface making the soil around the tailings pile sterile and retarding revegetation. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

Broad based erosion rates would not change in the suitable area.

In the nonsuitable area, broad based erosion rates would increase by about 10% to 15% (0.2 to 0.3 tons/acre/year) over the current rate of 2.0 tons/acre/year.

IMPACTS TO WATER QUALITY

Suitable Area

There would be no management actions within the suitable area that would impact water quality.

Nonsuitable Area

The projected 42% increase in livestock use would increase broad based soil erosion about 10% to 12% and increase the amount of sediment to waterways by 10% to 12%.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 5B through 5D). A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic and in the remote event that these substances accidently enter waterways, water quality would be adversely affected.

Mineral prospecting is projected in WSA OR-3-195 at 14 sites (Map 5A and 5B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and increase sediment loads and degrade water quality in the West Fork Little Owyhee River (Louse Canyon). Toxic substances could be brought to the surface and could enter waterways and degrade water quality. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

Water quality would not change in the suitable area. Suspended sediment loads would be increased up to 12% in nonsuitable areas. There is a remote possibility of toxic materials from oil and gas exploration and mineral prospecting adversely affecting water quality.

IMPACTS ON LOCAL INCOME AND JOBS

The AUMs available in the affected allotments in 20 years could result in an annual income of $3.0 million. This would be a 58% increase over the present situation (1982 licensed actual use). Recreation use in the WSAs projected in 20 years would result in annual income of $540,000 which is a 294% increase over the present situation.

Employment related to the available AUMs would be 83 jobs in 20 years. There would be 129 jobs in 20 years associated with the projected recreation use. These would be increases of 58% and 144% respectively.

The total income and employment impacts (in 20 years) from this alternative would be $3.5 million and 212 jobs. These would represent 1.0% and 0.7% of the 1981 local personal income and employment respectively. The total increase in income (above existing situation) would be $1.5 million or 0.4% of the 1981 local personal income. The total increase in employment would be 106 jobs or 0.4% of the 1981 employment in the local economy. These increases would be insignificant to the local economy.

Conclusion

The Canyonlands Wilderness Alternative would result in a 0.4% increase in personal income and a 0.4% increase in employment over 20 years in the three-county area.

WILDLIFE (BIGHORN SHEEP) WILDERNESS ALTERNATIVE

Under the Wildlife Wilderness Alternative, 291,910 acres of public land in seven WSAs in Oregon, Idaho and Nevada (including 1,100 acres of non-WSA lands) are recommended suitable for wilderness designation. The remaining 155,257 acres (including all of WSA NV-010-106) are recommended nonsuitable for wilderness. Within NV-010-106, 9,290 acres would be managed under the current BLM Owyhee River Management Area administrative designation.

IMPACTS TO WILDERNESS VALUES

Naturalness

Suitable Area

Land acquisition efforts are projected to add 12,440 acres to the suitable area. Acquisition of these lands would protect existing naturalness by ensuring against potential uses that could reduce naturalness. These lands have the potential for conflicting uses including the development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions, cultivated pastures and exploration for energy and mineral resources. A wilderness designation would increase the likelihood that interlocked private lands within the river canyons would be developed for recreational purposes because of the increased notoriety of the area.

River recreation use is projected to reach 11,000 user days annually within 20 years, a 500% increase over current use. This use would occur from about 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks during the 92 days within the carrying capacity monitoring period (April 1 through June 30 of each year).

The projected trip starts on the upper Owyhee River system (above Three Forks, Oregon) would result in about 525 campsite uses per year in 20 years, a 350% increase over current use. There are several hundred campsites along the river above Three Forks which is adequate to satisfy this projected demand without overcrowding. Because of the adequate supply of campsites, increased river recreation use is projected to only slightly reduce or change vegetative cover from trampling at the upper river campsites. The trampled vegetation would be a minimal visual impact which would reduce naturalness in the vicinity of the campsites. Therefore, impacts to naturalness at the upper river campsites from increased river recreation use are projected to be minimal.

Campsites along the middle Owyhee River (between Three Forks and Rome, Oregon) are limited (23 campsites) because of the steep slopes and narrow rocky canyon. A total of 194 trips per year, an increase of 325% over current use, would increase trampling of vegetation in these campsite areas. Management under the concept of the Limits of Acceptable Change (General Technical Report INT-176, Stankey 1985), which would include issuing permits and encouraging alternate campsites, would limit trampling of vegetation

(changes in natural character) to less than significant. Therefore, increased river recreation use would not significantly impact naturalness of the middle Owyhee River campsites.

Development and use of two boating launch sites would impact the natural landscape on a total of five acres. Facility construction (toilets and kiosks) would result in soil disturbance, however, revegetation of disturbed areas would occur within three years. Increased visitor use would result in the establishment of on site trails and tent pads. Toilets and kiosks would remain over the long term and would be a visual impact which would reduce naturalness in the immediate vicinity. Therefore, development and use of boating launch sites would cause minimal localized impacts to naturalness on a total of five acres.

The "45" Dam on the South Fork Owyhee River would be maintained to provide boater passage and irrigation water to private pasture lands along the South Fork Owyhee River between WSAs ID-16-48B and 16-53. Although not within a WSA, the dam and borrow pit area (two acres used for dam maintenance) are visible from the northernmost canyon area of WSA ID-16-53. Dam maintenance (replacement of dislodged rock material) would not change the appearance of the dam but would prevent revegetation of the borrow pit over the long term. The adverse visual impacts of the dam and borrow pit (vegetation removed or disturbed) would continue to cause localized reductions in naturalness over the long term on about two acres within the South Fork Canyon.

Stabilization of historic stone and wood buildings along the river system (mortaring, applying wood preservative, and re-roofing with timbers and sod) would prevent further deterioration and allow these structures to remain in place. The original design and appearance of the structures would be restored and maintained. The stabilization would not cause any additional impacts to naturalness along the river system.

Closure of 75.8 miles of roads and ways to motorized recreation use would affect naturalness. Nonuse of vehicle routes would result in the revegetation of roadbeds and wheel tracks with both grass and shrub species (primarily sagebrush) within 20 years. None of the six miles of roads and ways within the canyons are expected to have vehicle use. Though roads and ways would be closed to general public recreation use, some routes on the plateau would continue to be periodically used by livestock permittees to maintain reservoirs and fences. Based upon the geographical distribution of roads and ways and the expected need to maintain reservoirs and fences, it is projected that less than 50% of the vehicle routes on the plateau would be periodically used for this purpose. Tracking bulldozers on these roads and ways would crush the vegetation and several years would be required for recovery. Periodic use of roads and ways would allow the wheel tracks to be revegetated with native grass species, however, even minimal use would inhibit revegetation of wheel tracks by brush species (sagebrush). The tracks would remain noticeable on the terrain at close distances for over 20 years. Because of the flatness of the terrain, the 69.8 miles of vehicle routes on the plateau are largely unnoticeable over the WSA lands as a whole. Therefore, the partial or complete revegetation of roads and ways

would slightly enhance naturalness as a whole and moderately improve the natural character of the plateau. Of the total 75.8 miles of roads and ways closed to general public recreation use, 40.9 miles would fully revegetate (grass/shrubs), while 34.9 miles would only partially revegetate (grass). Consequently, road closures would have a beneficial impact on naturalness along 76 miles of roads and ways.

The projected 500% increase in annual boating use levels (11,000 user days) combined with the 144% increase in land-based recreation activities (3,934 user days in suitable area) would increase vehicle traffic on the river access roads which would remain open. Since the access roads would be maintained to existing standards, this increased vehicle traffic would not change the visual appearance of the access roads nor add to the existing visual impact that these roads have on naturalness. Therefore, there would be no impact on naturalness from increased vehicle traffic on river access roads.

Of the total 3,934 user days projected annually for land-based recreation activities, 1,700 user days are projected for backpacking activities. This primitive recreation use would be dispersed throughout the canyons and immediately adjacent plateau rimrock areas and would have no impact on naturalness.

Maintaining and reconstructing existing rangeland management facilities (reservoirs) would impact naturalness. With a 20-year maintenance cycle for reservoirs (stock ponds), five or six reservoirs would be maintained each year using bulldozers. Reservoir maintenance/reconstruction on some WSA reservoirs under the Interim Management Policy showed that cross-country bulldozer tracks to reservoir sites recovered to a largely unseen condition within five years, and recontouring dams and dirt piles associated with the reservoirs substantially reduced the area in which the reservoirs could be seen and made them appear more like natural features; thereby reducing their impact upon the natural landscape. Localized adverse visual impacts caused by cross-country access to some sites would last from five to ten years and would generally be confined to a small area in any given year. The impacts would consist of crushed sagebrush vegetation running in two parallel lines crossing the plateau landscape which would be visible only if a person is standing on the bulldozer tracks looking up and down their length. They would remain virtually unseen from lands adjacent to the tracks because of screening by sagebrush. Because many of the reservoir sites are accessed by existing boundary roads or cherrystem roads and ways, cross-country travel impacts from bulldozers would be limited. During the short term, naturalness would be adversely impacted for about five years at each reservoir site that is maintained or reconstructed until vegetation is reestablished. Based upon these findings, maintenance and reconstruction of reservoirs would result in a reduction in the current adverse visual impact of these reservoirs which would enhance naturalness in the vicinity of the reservoirs over the long term.

Maintenance of other rangeland facilities (fences, springs, pipelines) would continue. There would be no change in the appearance of these facilities and periodic vehicle use by livestock permittees for maintenance would continue to prevent the complete rehabilitation of roads and ways closed to general public recreation use by inhibiting the revegetation of wheel tracks by sagebrush. Therefore, maintenance of other rangeland facilities would not have an increased impact on existing naturalness.

Construction of new rangeland facilities (four reservoirs and three miles of fenceline) would affect naturalness on 130 acres in WSA OR-3-195 (including actual disturbance areas and visual zones, about 25 acres per reservoir and 10 acres per mile of fence). New reservoirs would be constructed to mitigate their localized adverse visual impacts to naturalness (low, rounded/crescent/oval forms). The visual impacts from the addition of these new facilities would be minimal since they would only be seen from over a small areas and would not result in a notable impact on naturalness in the suitable area as a whole. In total, construction of new rangeland facilities would cause site specific reductions in naturalness on 130 acres.

Naturalness on the plateau would be impacted through prescribed burning (15,200 acres; 1,520 acres per year average with reburning every 20 to 30 years) and improved grazing systems. Improved grazing systems would change livestock distribution and reduce grazing pressure. The reduced grazing pressure would allow native grasses and forbs to increase in abundance and height which would reduce the grazed appearance. Prescribed burning and subsequent revegetation would further result in fewer shrubs and an additional increase in native grasses and forbs. Since the increased forage (native grasses and forbs) from prescribed burning would not be available to livestock (no increase in livestock use), overall grazing pressure would be reduced. This reduced grazing pressure would allow an additional increase in the abundance and height of native grasses and forbs which would further reduce the grazed appearance. The reductions in the grazed appearance would improve the visual quality (naturalness) of these lands. This improvement in naturalness would be greatest in Idaho where all of the prescribed burning is planned. In Oregon and Nevada, naturalness on the plateau would also improve but to a lesser degree because no prescribed burning would occur. Although there would be a temporary (1 to 2 year) reduction in naturalness from reduced vegetation caused by burning until revegetation occurs, naturalness would be enhanced overall on 203,010 acres from improved grazing systems and on 15,200 acres from prescribed burning.

Utility corridor development would not occur on suitable lands. However, an additional pipeline adjacent to the existing El Paso gas pipeline on nonsuitable WSA lands would impact naturalness on about 195 acres of adjoining suitable lands. The impact would be a disturbance or change in the appearance of the landscape consisting of a 25-foot wide line of contrasting vegetation noticeably shorter than in surrounding areas and a dirt access road. This change in appearance would reduce naturalness over the long term. About 75 acres of plateau lands along the eastern side of Windy Point Butte in the southeast corner of WSA ID-16-49D would have naturalness further reduced by an additional pipeline. The existing pipeline disturbance is currently noticeable in this area and additional disturbance would further

reduce naturalness. An additional pipeline in WSA ID-16-49D would be visible from about 120 acres of the East Fork Owyhee River canyon and plateau rimrock areas in the northwest periphery of adjacent WSA ID-16-52. The additional pipeline would be buried or suspended immediately adjacent to the existing pipeline (25 feet instead of 50 feet) within the canyon and the existing 25-foot wide disturbance would be widened by about 12 feet. During construction of the additional pipeline, the existing disturbed area would be rehabilitated (recontoured and seeded) and although the total disturbed area would be 12 feet wider, the existing disturbance would be less noticeable following rehabilitation. Suspending another pipe across the river canyon would not noticeably add to the reduced naturalness caused by the existing suspended pipe. Consequently, reductions to naturalness in WSA ID-16-52 are projected to be noticeable on 120 acres. In total, naturalness would be reduced on 195 suitable acres over the long term from an additional pipeline on nonsuitable lands adjacent to the existing El Paso gas pipeline.

Exploration activities for oil and gas resources projected on nonsuitable lands would impact naturalness on 3,800 acres of suitable lands. It is projected that three oil/gas exploration drilling sites would be established in Oregon and Idaho (one each in WSAs OR-3-195, ID-16-48C and ID-16-49A). The site in WSA OR-3-195 would not be visible from suitable lands and would only affect nonsuitable lands. Establishment of each of the two drill sites in Idaho would result in a ten-acre clearing of topsoil and vegetation for the placement of a 150 foot high drilling rig, metal storage sheds, a one-acre mud pond and miscellaneous drilling materials/equipment. Drill sites would be accessed by ways up to 1.3 miles in length. Because of the height of the drill rigs and size of the associated buildings, the drill sites would be highly visible over large acreages of the plateau. In WSA ID-16-48C, the drill site would be obvious from 1,900 acres in the northwest portion of the WSA. In WSA ID-16-49A, the drill site would be obvious from 1,900 acres in the south-central portion of the WSA. The tall, vertical forms of the drill sites silhouetted against the horizon would contrast sharply with the broad, open and relatively flat natural terrain of the plateau. The drill sites would be visible for approximately one year while drilling occurs. Once exploratory operations are completed, rehabilitation of the sites and their access ways, including the replacement of topsoil and/or the seeding of grass and shrub vegetation on the drill pads and access ways, would render the drill sites unnoticeable from suitable lands. In total, naturalness would be reduced for one year on 3,800 suitable acres during oil and gas exploration activities on nonsuitable lands.

Nonsuitable Area

Federal-state land exchanges are projected to transfer 14,300 acres of Idaho state land which adjoin nonsuitable WSA plateau lands to federal ownership. These state lands contain grass/sagebrush vegetation used primarily for livestock grazing. Whether the lands are in state or federal ownership, livestock use is projected to continue. This use of the non-WSA lands would have no impact on the naturalness of nonsuitable WSA lands. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would protect existing naturalness by ensuring against potential uses that could reduce naturalness. The easement would prevent

potential development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions and cultivated pastures which could reduce the sense of naturalness found on adjoining nonsuitable WSA lands to the southeast and southwest of the property.

Development of a launch site (toilets, kiosk and road access) would cause a localized reduction in naturalness on about two acres on private land at Twelve Mile.

The 76.9 miles of cherrystem roads and ways remaining open for general public recreation use on plateau lands are projected to receive 711 user days of semi-primitive recreation use. This low level of recreation use would not increase vehicle use on the affected roads/ways to a level high enough to change the existing visual appearance of vehicle routes on the landscape. Therefore, impacts to naturalness from increased semi-primitive recreation use are not projected to increase.

No backpacking use is expected to occur across the nonsuitable plateau lands because of more desirable areas nearby. About 100 user days for backpacking would occur in the nonsuitable canyonlands and immediate plateau rimrock areas in WSA NV-010-106. This use would have no increased impact on naturalness.

Impacts to naturalness on nonsuitable lands from the construction of six new reservoirs and six miles of fence and maintenance of existing reservoirs would be similar to but slightly greater (more adverse) than those described for suitable lands. Since less stringent environmental constraints would apply to construction and maintenance of rangeland facilities within the nonsuitable area compared to the suitable area, reservoirs and fences would not necessarily blend with the environment and would be more apparent. In total, 210 acres would have site specific reductions in naturalness due to the additional construction of five reservoirs and six miles of fence in WSA OR-3-195 and one reservoir in WSA ID-16-48C.

Naturalness on plateau lands would be affected by the implementation of grazing systems and prescribed burning (13,300 acres; 1,330 acres per year average with reburning every 20 to 30 years) as previously described for the suitable area except that 6,650 acres (50% of the 13,300 acres burned) would be seeded to non-native grass species using rangeland drill machinery. The increased abundance of grasses on both treated and untreated areas together with the corresponding increase in the number of livestock would maintain rather than reduce the grazed appearance of the landscape. The 6,650 acres treated with drill machinery would suffer a severe loss of naturalness. The drill machinery would establish the seeded vegetation in a linear or striated growth pattern (cultivated appearance) which would contrast with natural growth patterns. Because land treatment within the Idaho WSAs (5,400 acres) would occur intermixed among native vegetation areas, the adverse impact to naturalness would extend over much of the nonsuitable plateau (32,190 acres) south of the Owyhee and East Fork Owyhee Rivers. It would be difficult to travel across these portions of plateau without encountering unnatural treated areas. In Oregon WSA OR-3-195, reductions in naturalness from drill seeding 1,250 acres would be located in one relatively small area (2,500

acres) in the southeast portion of the WSA. It would be over 20 years before the cultivated appearance would disappear and the apparent naturalness is restored. The rate of restoration would be largely dependent upon the rate of sagebrush regeneration on seeded sites.

The El Paso corridor in Idaho and Nevada would be 1/4 mile to 3/4 miles wide along the existing El Paso gas pipeline. This pipeline is buried except where it is suspended across the Garat Gorge on the East Fork Owyhee River. The buried pipeline has a 25 foot wide right-of-way which was fully disturbed during the laying of the pipe and the subsequent establishment of a maintenance road paralleling the pipe. Construction is projected for an additional buried pipeline 50 feet to the west of the existing pipeline, except at the river crossing where the pipeline would be constructed immediately adjacent to the existing pipeline. The additional pipeline would have a constructed and maintained road along its west side, except at the river crossings where existing roads would be maintained. The additional pipeline right-of-way is also projected to have a 25 foot wide disturbance resulting in a total soil surface disturbance area within three WSAs of about 25 acres.

In WSA NV-010-103A the plateau, and to a much lesser extent the canyonlands, topography slopes sharply downward toward the El Paso pipeline, thereby making the existing disturbance substantially noticeable over 2,662 acres in the WSA's southern periphery. The addition of another 25 foot wide disturbance plus the widening (12 feet more) of the pipeline disturbance across the South Fork Owyhee River Canyon would further reduce naturalness on 2,662 acres.

Development of the El Paso Corridor in WSA NV-101-103A would impact naturalness on about 320 acres of canyon and plateau lands in the northern periphery of adjacent WSA NV-101-106. The existing disturbance from burying the El Paso gas pipeline in the canyon slopes lying between the two WSAs is substantially noticeable over the 320 acres. The disturbance from placing an additional pipeline would also be noticeable and would further reduce naturalness in the northern periphery of WSA NV-010-106.

In WSAs ID-16-49D and ID-111-49E, the existing pipeline is generally unnoticeable because the lands slope gently downward away from the pipeline. Only on a small area of about 25 nonsuitable acres on the southeast side and top of Windy Point Butte, in the southeast corner of WSA ID-16-49D, is naturalness reduced by views of the pipeline. Placement of the additional pipeline would further reduce naturalness in the Windy Point area and on about eight additional acres along the remainder of the two WSAs' southeast peripheries.

Development of the pipeline in WSA ID-16-49D would impact the naturalness of the canyon and some of the plateau in the northwest periphery of adjacent WSA ID-16-52. The existing pipeline is visible over about 200 acres of the East Fork Owyhee River canyon and adjacent plateau rimrock areas. The additional pipeline would be buried or suspended immediately adjacent to the existing pipeline (25 feet instead of 50 feet) within the canyon, and the existing 25-foot wide disturbance would be widened by about 12 feet. During

construction of the additional pipeline, the existing disturbed area would be rehabilitated (recontoured and seeded), and although the total disturbed area would be 12 feet wider, the existing disturbance would be less noticeable following rehabilitation. Suspending another pipe across the river canyon would not noticeably add to the reduced naturalness caused by the existing suspended pipe. Consequently, reductions to naturalness in WSA ID-16-52 are projected to be moderate on 200 acres.

In total, placement of an additional pipeline adjacent to the existing El Paso gas pipeline would moderately to severely reduce naturalness on 3,215 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106.

The Twelve Mile corridor in Nevada (WSA NV-010-106) would be a five mile wide corridor which would extend from Twelve Mile southward to the WSA's southern boundary at the "YP" Ranch. It is projected that two high voltage powerline systems would traverse southwest-northeastward through the corridor, paralleling each other at a distance of one mile. It is estimated that at least 27 towers would be placed in the WSA at a distance of about 1,300 feet apart. Twenty-seven towers 150 feet high and 90 feet wide would be substantially visible over the entire nonsuitable southern plateau area (7,150 acres) of the WSA. In addition, about 200 acres of canyonlands in the southern portion of the WSA would be visually impacted by towers standing adjacent to the rimrock and by powerlines, with brightly colored warning balls, stretching across the sky above the canyon walls. The visual presence of these powerline systems would substantially reduce naturalness on 7,350 acres of plateau and canyon.

Exploration activities for oil and gas resources are projected to occur on WSA lands recommended nonsuitable for wilderness designation. It is projected that three oil/gas explorational drilling sites would be established in Oregon and Idaho (one each in WSAs OR-3-195, ID-16-48C and ID-16-49A). It is also projected that "thumper" trucks would be used in three to five mile square grids for seismic testing of underlying rock strata. Establishment of each drill site would result in a ten-acre clearing of topsoil and vegetation for the placement of a 150 foot high drilling rig, metal storage sheds, a one-acre mud pond and miscellaneous drilling materials/equipment. Drill sites would be accessed by ways up to 1.3 miles in length. Because of the height of the drill rigs and sized of associated buildings, the drill sites would be highly visible over large acreages of the plateau. In WSA OR-3-195, the drill site would be obvious from at least 3,200 acres in the southeast portion of the WSA; in WSA ID-16-48C, the drill site would be obvious from 3,500 acres in the northwest portion of the WSA; in WSA ID-16-49A, the drill site would be obvious from at least 2,800 acres in the south-central portion of the WSA. Within the three WSAs, naturalness would be reduced on a total of 9,500 nonsuitable acres. All but 1,300 acres (in WSA OR-3-195) of these 9,500 acres would also have a loss of naturalness due to drill seedings. The tall, vertical forms of the drill sites silhouetted against the horizon would contrast sharply with the relatively flat natural terrain on the plateau. The drill sites would be visible from additional nonsuitable acreage, however, adverse impacts on these acreages are expected to be minimal. Once exploratory operations are completed,

rehabilitation of the sites and their access ways, including replacement of topsoil and/or seeding grass and shrub vegetation on the drill pads and access ways, would render the drill sites to a substantially natural condition within three to five years. Complete restoration would be expected to occur within 20 years.

Thumper truck grids would produce moderate amounts of sagebrush crushing in paralleling grids every three to four miles across plateau lands. Sagebrush crushing would be noticeable for a period of five years in close proximity to the grid lines, but would not be substantially noticeable on the lands as a whole nor in the long term.

Within WSA OR-3-195, two prospecting sites of one acre each are projected on the plateau east of Louse Canyon in Oregon. Naturalness would be impacted on about 320. Following completion of prospecting activities, soil and vegetation is not projected to be readily restored by required rehabilitation work. Heavy metal soil/rock deposits uncovered during prospecting could hinder revegetation of the area. The limited opportunity for complete restoration of prospect sites would cause the naturalness in this area to be reduced for well beyond 20 years. The disturbance and access roads associated with the prospects would be readily seen. Even though only two acres of actual disturbance would occur, a total of 320 acres are projected to have naturalness substantially reduced because of the topographic features where the prospects would be located.

Conclusion

In the suitable area, naturalness would be reduced for one year on about 3,800 acres on the plateau during oil/gas exploration drilling operations on adjacent nonsuitable lands. Construction of new reservoirs and fences would permanently reduce naturalness on 130 acres. Naturalness on 195 acres would be permanently reduced or lost by visual intrusions from pipeline development on nonsuitable lands within the El Paso corridor. Over the long term, naturalness within the suitable area would be slightly enhanced along 75.8 miles of road/way closures, enhanced on 15,200 acres from prescribed burning (Idaho), enhanced on 203,010 acres from improved grazing systems and enhanced locally from maintenance of existing reservoirs.

In the nonsuitable area, naturalness would be permanently reduced or lost on 3,215 acres from pipelines and on 7,350 acres from powerlines. Naturalness would be reduced for over 20 years on 34,690 acres from vegetation treatments (mechanical drilling of non-native grass species). Some of this acreage (8,200 acres), plus an additional 1,300 acres (9,500 acres total) would have naturalness reduced for up to one year while oil/gas exploration drilling rigs are operating. Naturalness would be permanently reduced on 210 acres from new reservoir and fence construction. Naturalness would be substantially reduced on 320 acres for well beyond 20 years from mineral prospecting.

TABLE IV-13
ADVERSE IMPACTS TO NATURALNESS - WILDLIFE WILDERNESS ALTERNATIVE

W S A	SUITABLE AREA					NONSUITABLE AREA					WSA TOTAL				
	VEG. TRT.	UTILITY	MIN.	ENERGY	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL	VEG. TRT.	UTILITY	MIN.	ENERGY 2/	TOTAL
OR-3-195 (ID-16-48B)	0	0	0	0	0	2,500	0	320	1,300 (1,900)	4,120	2,500	0	320	1,300 (1,900)	4,120
ID-16-48C	0	0	0	1,900	1,900	16,140	0	0	(3,500)	16,140	16,140	0	0	1,900 (3,500)	18,040
ID-16-49A	0	0	0	1,900	1,900	3,440	0	0	(2,800)	3,440	3,440	0	0	1,900 (2,800)	5,340
ID-16-49D	0	75	0	0	75	200	28	0	0	228	200	103	0	0	303
ID-111-49E	0	0	0	0	0	0	5	0	0	5	0	5	0	0	5
ID-16-52	0	120	0	0	120	1,360	200	0	0	1,560	1,360	320	0	0	1,680
ID-16-53 (NV-010-103A)	0	0	0	0	0	11,050	2,662	0	0	13,712	11,050	2,662	0	0	13,712
NV-010-106	0	0	0	0	0	0	7,670	0	0	7,670	0	7,670	0	0	7,670
TOTALS 1/	0	195	0	3,800	3,995	34,690	10,565	320	1,300	46,875	34,690	10,760	320	5,100	50,870

1/ Acreage does not include areas of small localized impact caused by reservoir or fence construction, "45" dam maintenance, boating launch site development, road/way development or recreation use.

2/ Parentheses () around energy numbers indicate acreages also affected by vegetative treatments. Energy acreages are not included in totals to prevent double counting.

Solitude Opportunities

Suitable Area

Acquisition of 12,440 acres of non-federal lands would ensure that these lands, particularly private lands (1,720 acres) within the river canyons, are not developed or used for activities which could reduce solitude on adjoining WSA lands. Currently all of these lands are used for livestock grazing and occasional recreation. Wilderness designation, and its accompanying notoriety, could result in one or more of the private land parcels in the river canyons (all of which are accessed by roads) being developed as a commercially operated, recreation oriented lodge or resort if the lands are not acquired. Such development could substantially reduce solitude opportunities on a localized basis as human activity increases. Since these lands would be acquired and development would be precluded, opportunities for solitude would not be affected.

River running recreation use is projected to reach 11,000 user days per year (Table IV-2). This use is expected to occur during an optimum 45-day float period sometime between April 1 and June 30 of each year depending upon climate and river flow conditions. The use would occur from 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks. On an average, this amount of use would equate to one trip starting on the East Fork every two days and on the South Fork about once or twice per day. In a good water year, currently the East Fork gets five trips per year (one launch every nine days); the South Fork gets ten trips (one launch every five days), the main stem Owyhee River gets 35 trips (one launch every one to two days). This

change in launch frequency over 20 years would be a 500% to 1000% increase in the potential for recreation user group interaction. Because the rate of travel for each float party would be the same for the East Fork and South Fork, those groups starting from the upper river launch sites (WSA ID-16-49/52 and NV-010-106) would generally not encounter each other while floating on the two forks of the river. Float group interaction would generally begin on the Owyhee River in WSA ID-16-48B below the confluence of the East-South Forks where boating parties merge together. Presently, the merging of float trips on the Owyhee River results in less than one interaction between parties between the confluence and the Three Forks take-out/put-in. In 20 years, the expected group interaction would increase to five or more on this section of river. Below Three Forks in WSA OR-3-195, a launch schedule of four trips per day would raise group interaction rates from a current rate of less than one per day to four or more per day. Such increases in float group interaction would cause a notable loss in opportunities for solitude.

Backpacking use is projected to reach 1,700 user days annually in canyonlands and associated plateau rimrock areas. About 50% of the backpacking use would occur in the spring when river running activities are also occurring. The remainder of the backpacking use would occur during the fall. Presently, little or no interaction between boaters and hikers occurs due to the minimal amount of use and the fact that backpacking primarily occurs in tributary canyons such as Deep Creek, Battle Creek and Louse Canyon. In 20 years, it is projected that backpacking use would remain largely in tributary canyons. Backpacking/boating group interaction in the river canyons should remain at less than one per trip in the East Fork, South Fork and main stem Owyhee River system, therefore, backpacking use would minimally contribute to reductions in solitude opportunities.

When boaters and backpackers travel the river launch site access roads to reach the canyon areas, they will interact with those engaging in other primitive recreation or semi-primitive recreation experiences (mostly sightseeing in the spring, and mostly hunting in the fall). Semi-primitive recreation use is projected to reach 2,134 user days in 20 years. The combined activities of the boaters/sightseers or backpackers/hunters, etc. at the river launch sites would produce almost daily use of these sites and cause a localized reduction in solitude opportunities at these sites. Construction of minimal recreation facilities at two launch sites (toilets and kiosks) would not contribute to increases in recreation use. The facilities would mitigate public health and safety concerns generated by increased recreation use.

In some canyon areas and on the plateau lands surrounding the canyons, 75.8 miles of roads and ways would be closed to motorized recreation use. These closures would slightly increase solitude opportunities yet few recreationists are expected to benefit from this opportunity because most primitive recreation activities would be occurring in close proximity to the canyon rimrocks away from much of the closed plateau vehicle routes.

Rangeland management actions would have no increased impact on solitude opportunities. These actions include construction and maintenance of

rangeland projects (fences and reservoirs) and vegetative manipulation. The amount of human activity associated with these activities, as well as day-to-day grazing system management, is not expected to change enough to affect current opportunities for solitude over the long term.

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor. Opportunities for solitude on lands adjoining the utility corridors would be temporarily (1.5 months) reduced on 195 acres in WSAs ID-16-49D and ID-16-52 due to human activity while construction is occurring. Once construction is completed, occasional use on the utility maintenance roads or ways for motorized recreation and facility maintenance would have no impact on opportunities for solitude.

Oil and gas exploration activity at exploratory drill rig sites would be seen and heard over about 3,800 suitable acres in WSA ID-16-48C and ID-16-49A for a period of nine to twelve months. This activity would reduce solitude opportunities during the period of exploratory drilling. Following the completion of exploration activities, solitude opportunities would return to pre-exploration conditions.

Nonsuitable Area

Acquisition of 14,300 acres of Idaho state lands would have no impact on solitude opportunities. These lands would continue to receive only occasional human activity associated with livestock grazing and semi-primitive motorized recreation use. Other non-federal land acquisition includes a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106. Following easement acquisition, management actions include constructing minimal recreation facilities (toilet and kiosk) and improving road access to make the area a boating launch site. Acquisition would also prevent potential commercial lodge development which would maintain existing solitude opportunities.

The launch site (road improvement, toilet and kiosk) at Twelve Mile in WSA NV-010-106 would be built on private lands under the authority of a recreation easement. Development of this new launch site would help disperse river recreation use along the upper South Fork Owyhee River in WSA NV-010-106 and ID-16-53(NV-010-103A), and enhance solitude opportunities in this area.

Land-based recreation is projected to reach 100 user days of backpacking use along the South Fork Owyhee River Canyon and rimrock area and 711 user days of semi-primitive motorized recreation use (principally hunting and some sightseeing) on the plateau where existing roads/ways would remain open for motorized use. This level of recreation use (144% increase) would not noticeably contribute to a reduction in solitude opportunities, even in the South Fork Owyhee River Canyon where river recreation is occurring.

Rangeland management actions would have no increased impact on solitude opportunities. The amount of human activity associated with construction and

maintenance of fences and reservoirs, vegetative manipulation, and day-to-day grazing system management is not expected to change enough to affect current opportunities for solitude.

Utility corridor development would result in the construction and maintenance of buried pipelines in the El Paso corridor and overhead powerlines in the Twelve Mile corridor. Opportunities for solitude within the corridors would be temporarily (1.5 months) reduced during the construction period on 3,215 acres of the El Paso corridor in WSAs ID-16-49D, ID-16-52, ID-111-49E and NV-010-103A and on 3,675 acres of the Twelve Mile corridor in WSA NV-010-106. Once construction is completed, occasional vehicle use on the two new ways developed along the Twelve Mile corridor powerlines in the southern portion of WSA NV-010-106 would slightly reduce solitude opportunities, principally during fall hunting. Though the El Paso corridor pipeline construction would result in a new road, it would immediately parallel an existing maintenance road. The new road would offer an alternative travel route in a currently traveled area rather than a new route in an untraveled area. Therefore, the new pipeline is not projected to result in increased motor vehicle use or in loss of solitude opportunities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. Human activity at the exploratory drill rig sites would be seen and heard over about 9,500 acres in the three WSAs for a period of nine to twelve months. This exploration activity would reduce solitude opportunities during the period of operation. Following completion of exploration activities, solitude opportunities would return to pre-exploration conditions.

About 320 acres of plateau lands in WSA OR-3-195 east of Louse Canyon would be affected by two mining prospects and related access ways. Human activity would reduce solitude opportunities in this area during the period that prospecting is active (up to one year). Following completion of prospecting activities, solitude opportunities would return to pre-prospecting conditions.

Conclusion

On suitable lands, a slight increase in solitude opportunities would occur in some canyon areas and across the plateau as a result of closing 75.8 miles of roads and ways to motorized recreation. Notable localized reductions in solitude opportunities are projected in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to increased float group interactions. Localized reduction in solitude opportunities are projected at the boating launch sites where vehicle access along maintained roads would concentrate recreation use and cause frequent interaction between visitors. Short-term (1.5 month) reductions in solitude opportunities are projected on 195 suitable acres in WSAs ID-16-49D and ID-16-52 during pipeline construction on adjoining nonsuitable lands along the El Paso corridor. A total of 3,800 suitable acres would also have a temporary (nine to twelve months) reduction in solitude opportunities during oil and gas exploratory drilling on adjoining nonsuitable lands in WSAs OR-3-195, ID-16-48C and ID-16-49A.

On nonsuitable lands, a temporary (1.5 months) reduction in solitude opportunities would occur on a total of 3,215 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A, and NV-101-106 during pipeline construction along the El Paso corridor. An additional 3,675 acres in WSA NV-010-106 would have solitude opportunities temporarily (1.5 months) reduced during powerline construction in the Twelve Mile corridor. A slight reduction in solitude opportunities would continue in this WSA as semi-primitive motorized recreation use occurs along vehicle routes established during powerline construction. Another 9,500 acres of nonsuitable lands in WSAs OR-3-195, ID-16-48C and ID-16-49A would have solitude opportunities temporarily reduced (nine to twelve months) during oil and gas exploratory drilling activities. About 320 acres in WSA OR-3-195 would have reduced solitude opportunities for up to one year during mineral prospecting activities.

Primitive Recreation Opportunities

Outstanding primitive recreation experiences exist only on those lands which contain a high degree of naturalness and offer a high degree of solitude opportunities. Changes in either the degree of naturalness or solitude opportunities change primitive recreation opportunities. In the Owyhee Canyonlands WSA complex, opportunities for primitive recreation experiences would change on the same acreage where changes in naturalness or solitude opportunities occur. Naturalness and solitude opportunity impact areas generally coincide with each other except in the canyon areas where solitude impacts occur from recreation user group interaction.

Suitable Area

Acquisition of 12,440 acres of non-federal lands would enhance opportunities for primitive recreation by ensuring that these lands remain natural in character and are not eventually developed with conflicting uses which could reduce opportunities for solitude.

In the canyon areas, a slight localized reduction in primitive recreation opportunities would accompany reductions in solitude opportunities caused by increases in boating group interaction along the Owyhee River in WSA OR-3-195 (ID-16-48B), and by increased interaction between boaters and others who use the maintained roads into the various boating launch sites.

Maintenance of the "45" Dam would allow the existing localized loss of naturalness in the South Fork Owyhee Canyon at the northern edge of WSA ID-16-53 to continue. This loss of naturalness locally reduces existing primitive recreation opportunities because river runners must scout and run or line/portage an unnatural structure which blocks the otherwise free-flowing river system. Therefore, maintenance of the "45" Dam would not impact the existing level of primitive recreation opportunities.

Stabilization of historic sites (stone buildings and wood cabins) along the river would benefit primitive recreation opportunities by ensuring the continued enjoyment of viewing these structures for their cultural value.

Though not natural in character, they stand as examples of how civilization has come and gone from the Owyhee Canyonlands and heighten the sense of harsh conditions and challenge associated with traveling and living in the area.

In some canyon areas and on the plateau, primitive recreation opportunities would be enhanced slightly over the long term as enhanced naturalness (revegetated wheel tracks) and increased solitude opportunities (elimination of motorized recreation) occur from the closure of 75.8 miles of roads and ways.

Rangeland management actions include prescribed burning, implementing grazing systems, and maintaining reservoirs (reconstructing to higher visual standards). Prescribed burning and implementing grazing systems would increase the abundance and height of native grasses and forbs and reduce the grazed appearance which would enhance naturalness across the plateau. Maintaining reservoirs (which would make them appear more like natural features) would reduce their current visual impact and enhance naturalness locally. This enhanced naturalness from rangeland management actions would slightly enhance primitive recreation opportunities on 203,010 acres across the plateau over the long term.

Construction of four new reservoirs and three miles of fence in WSA OR-3-195 would locally reduce naturalness on 130 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area.

Development of the El Paso corridor for buried pipelines, though occurring on nonsuitable lands, would be visible from about 195 acres of suitable lands in WSAs ID-16-49D and ID-16-52. The visual evidence of the pipeline (contrasting vegetation) would cause these lands to be less natural in character over the long term. This loss of naturalness would also permanently reduce primitive recreation opportunities on the 195 suitable acres. Losses in solitude opportunities would occur only during the construction period (1.5 months).

Temporary (nine to twelve months) activity at oil and gas exploratory drill sites on nonsuitable lands in WSAs ID-16-48C and ID-16-49A would be visible from about 3,800 acres of suitable lands in the two affected WSAs. The activity would cause localized reductions in both naturalness and solitude opportunities over these 3,800 acres during the short term. The reduced naturalness and solitude opportunities would also reduce primitive recreation opportunities during the short term over these acres. A third drill site on nonsuitable lands in WSA OR-3-195 would not be visible from suitable lands in this WSA.

Nonsuitable Area

Acquisition of 14,300 acres of Idaho state lands would have no impact on the primitive recreation opportunities since recreation activities would be allowed to continue. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would prevent potential conflicting uses and maintain naturalness and solitude opportunities which would enhance primitive recreation opportunities.

Construction of a boating launch site (improved road access, toilet and kiosk) at Twelve Mile in WSA NV-010-106 under the authority of a recreation easement would facilitate the dispersion of primitive recreation use on the upper South Fork Owyhee River; thereby enhancing primitive recreation opportunities through improved solitude opportunities.

Construction of five new reservoirs and six miles of fence in WSA OR-3-195 and one reservoir in WSA ID-16-48C would cause localized reductions in naturalness on 210 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area. On the nonsuitable plateau, 34,690 acres would have primitive recreation opportunities reduced because of losses in naturalness due to the cultivated appearance associated with mechanical drill seeding in native vegetative communities.

Development of the El Paso and Twelve Mile corridors for buried pipelines or overhead powerlines would reduce primitive recreation opportunities. In WSAs ID-16-49D, ID-111-49E, ID-16-52 and ID-010-103A, 3,215 acres in the El Paso corridor would have primitive recreation opportunities moderately to severely reduced because of a loss of naturalness caused by the visual presence of another pipeline disturbance. Solitude losses would be temporary (1.5 months) during facility construction. Development of powerlines in the Twelve Mile corridor within WSA NV-010-106 would also moderately to severely reduce primitive recreation opportunities over 7,350 acres because of the loss of naturalness caused by the persistent views of the powerlines coupled with a slight loss in solitude opportunities due to some use of powerline access ways for motorized recreation activities.

Oil and gas exploration activity is projected in WSAs OR-3-195, ID-16-48C and ID-16-49A. This activity would be visible over 9,500 acres of surrounding nonsuitable lands, resulting in a temporary (nine to twelve month) loss of primitive recreation opportunities due to losses in naturalness and solitude opportunities.

The use of "thumper" trucks to do seismic testing on a grid pattern across plateau lands would also cause some reduction in primitive recreation opportunities for a period of five years as the naturalness of native vegetation recovers from vehicle track damage.

A temporary (less than one year) loss of solitude opportunities and a loss of naturalness for more than 20 years would occur over 320 acres in WSA OR-3-195 as a result of mineral prospecting. This loss of naturalness and solitude opportunities would result in a reduction in primitive recreation opportunities for more than 20 years.

Conclusion

Primitive recreation opportunities on suitable lands would generally be retained as a whole. A slight enhancement in primitive recreation opportunities would occur across the plateau and in some canyon areas as a result of closing 75.8 miles of roads and ways to motorized recreation use, and across the plateau as a result of prescribed burning, grazing systems and reservoir maintenance. Some localized reduction in primitive recreation

opportunities would occur in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) due to projected increases in river boating use. Localized reductions in primitive recreation opportunities would also occur at boating launch sites where vehicle access along maintained roads would concentrate recreation use. Construction of four new reservoirs and three miles of fence would locally reduce primitive recreation opportunities on 130 acres. Suitable lands totalling 195 acres in WSAs ID-16-49D and ID-16-52 would have primitive recreation opportunities permanently reduced from new pipeline construction on adjoining nonsuitable lands in the El Paso corridor. About 3,800 suitable acres in WSAs ID-16-48C and ID-16-49A would have primitive recreation opportunities temporarily (nine to twelve months) reduced during oil and gas exploration activity on adjoining nonsuitable lands.

On nonsuitable lands permanent reductions in primitive recreation opportunities would occur on 3,215 acres in WSAs ID-16-49D, ID-111-49E, ID-16-52, NV-010-103A and NV-010-106 from construction of a new pipeline in the El Paso corridor. Another 7,350 acres would have primitive recreation opportunities permanently reduced by powerline construction in the Twelve Mile corridor in WSA NV-010-106. About 34,690 acres of nonsuitable plateau would have primitive recreation opportunities reduced for over 20years by mechanical drill seeding in native vegetation communities. Construction of six new reservoirs and six miles of fence would locally reduce primitive recreation opportunities on a total of 210 acres. Losses in primitive recreation opportunities would occur for a period of nine to twelve months on a total of 9,500 nonsuitable acres within WSAs OR-3-195, ID-16-48C and ID-16-49A while oil and gas exploration activities are occurring and for over 20 years on 320 acres in WSA OR-3-195 from mineral prospecting.

Special Features (Bighorn Sheep)

Suitable Area

Acquisition of land along the Owyhee River, Battle Creek and Deep Creek would enhance management and protection of bighorn sheep. Acquisition would ensure that potential resource uses on these lands would not adversely impact bighorn sheep in adjoining suitable areas.

It is projected that in 20 years river boating use would reach 11,000 user days annually (a 500% increase over present levels). Use on the East Fork Owyhee River would increase from an average of one trip every eight days to one trip every two days during the peak boating period. During the same period, the South Fork would increase to nearly two trips every day. At Three Forks, use would increase to four trips a day. These increases in use would be very gradual, and bighorn sheep would be able to adjust to this increased use because the sheep would primarily be at the upper levels of the canyon walls and the boaters would be down on the river. Sheep were found to be curious of boaters along the Colorado River as long as boaters stayed in the boats (Manson and Summer 1980). Human activity at favorite "camp spots" along the river would cause temporary displacement of sheep in the vicinity of the camp spots while human activity is occurring, but this displacement would be minor and would not effect bighorn sheep populations over the long term.

Recreation user day projections for primitive and semi-primitive recreation activities other than whitewater boating would be about 4,645 user days annually within 20 years. Much of this use, including all 1,800 user days for backpacking/horsepacking and 50% or more of the hunting use (1,300 user days), would occur in association with canyon and plateau areas used by bighorn sheep. These recreation use levels could result in behavioral and/or physiological impacts to bighorn sheep. Studies by the U.S. Forest Service and California Department of Fish and Game (Light 1971, Graham 1971) have shown that human use of desert bighorn sheep habitat in excess of 500 visitor days (a visitor day being one 12 hour visit) can cause bighorn sheep to withdraw from their ranges. Another study of California bighorn sheep habitat in the Sierra Nevada Mountains (Dunaway 1971) identified gaps between five bighorn sheep ranges corresponding to areas of high human use. Three of these ranges also suffered losses in population numbers after major increases in recreation use, while the populations in the other two ranges not exposed to surges in recreational use remained stable.

The tolerance of human activity by bighorn sheep can vary dramatically from one population to another. This variation depends upon many factors including the duration, frequency, location, season and nature of the disturbance and past experiences of the population and the individual mature sheep, particularly the herd leader. In the case of the Owyhee Canyonlands WSAs, the timing, location and frequency of recreation use are all of major concern. Over 50% of the projected backpacking/horsepacking use is expected to occur during the cooler, moist spring months during the bighorn lambing period when they are especially sensitive to disturbance. All of the hunting use would occur in the fall months in conjunction with backpacking and horsepacking use. Unlike the projected river boating use, much of the backpacking/horsepacking and hunting use would be located along the canyon rimrocks and in the major tributary canyons at or above the same topographical level where the bighorn sheep population normally resides. This topographic interrelationship between recreation users and bighorn sheep has been observed to cause greater distress than if recreation activities, such as boating, are confined to areas below the bighorns (Manson and Summer 1980). Consequently, projected backpacking/horsepacking and hunting use, combined with boating use, could cause disturbance to bighorn sheep populations. This disturbance would result in displacement of portions of the population into canyon areas to the north of the WSA complex unless the bighorn sheep are able to slowly adjust to human activity as recreation use increases.

Closure of 75.8 miles of roads and ways would limit access to the canyon rims. The closures would reduce human activity and vehicle noise in the interior of the suitable area. Since public access to the river system would be restricted to only a few spots, disturbance would be localized, resulting in reduced human disturbance to bighorn populations in the canyons and adjacent plateau rimrock areas. Since human traffic would be reduced, stress on the animals would also be reduced.

Since state wildlife management agencies would continue wildlife population management practices under each alternative, California bighorn sheep populations are projected to grow and serve as a source for transplants

to other areas. Use of helicopters for trapping and transplanting bighorn sheep would continue to support establishment and expansion of the population. Maintenance of existing road networks between and adjacent to the WSAs would allow vehicle access for state game agencies to carry out transplanting programs.

Prescribed burning would be beneficial to bighorn sheep, especially where areas are burned within two miles of the canyon rims and with no increase in livestock use in the suitable areas. The burns would open up dense sagebrush stands and allow native grasses and forbs (Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox) to increase. This improved range condition on the plateau would increase forage availability and improve overall habitat conditions (forage/cover ratio) for bighorn sheep.

Construction of new reservoirs would improve bighorn habitat and their distribution. Although reservoirs near the canyon would be 1/2 to 1 mile from the canyon rims, they would still improve distribution for bighorn as well as livestock. These reservoirs will allow for more even utilization of the forage by both livestock and bighorns on the plateaus.

Based on current population estimates, projected recreation increases, available habitat, new reservoirs and improvements in range conditions, bighorn sheep populations are projected to reach 900-1,200 animals in 20 years, a 300% increase over present levels.

Nonsuitable Area

Human activity associated with pipeline construction near the canyon in WSAs ID-16-49D and ID-16-52 (El Paso corridor) would cause localized disturbance and short-term displacement (1.5 months) of sheep adjacent to the pipeline corridor but would not affect population numbers.

Human activity associated with mineral prospecting (two sites) in WSA OR-3-195 would cause localized disturbance and short term displacement (up to one year) of bighorn sheep during prospecting activities but would not affect population numbers.

Conclusion

In the suitable area, land acquisition along the Owyhee River, Battle Creek and Deep Creek would ensure that bighorn sheep in adjacent areas are not adversely impacted. Roads and ways closed on suitable lands would decrease disturbances to bighorn sheep populations, especially along the canyon rims. Increased recreation use could disturb bighorn sheep populations and cause displacement over the long term. On nonsuitable lands, pipeline construction across the canyon in WSAs ID-16-49D and ID-16-52 would cause short-term displacement of bighorn sheep. Mineral prospecting in WSA OR-3-195 would also cause short-term displacement. Within the WSA complex, bighorn sheep populations are projected to expand into available unoccupied habitat. The population projection over the next 20 years is 900 - 1,200 animals.

Special Features (Cultural Values)

Suitable Area

Closure of 75.8 miles of roads and ways to motorized recreation and elimination of off-road vehicle use would reduce the current adverse impacts to cultural resources by reducing motorized access to sites now subject to acts of vandalism and theft, particularly along the canyon rim.

The projected 20 year boating use levels of 11,000 user days annually would mean that each of the major historic site complexes as well as considerable numbers of prehistoric lithic scatters, multi-functional campsites, rockshelters and rock art sites within the river canyons would be visited by parties of up to 15 people on an average of once every two days on the East Fork of the Owyhee River; twice a day on the South Fork; and four times a day below Three Forks during the peak use period of April 1 through June 30. While public education and information efforts would discourage most people from acts of vandalism and theft, the number of such acts would likely increase as visitor use rises over the next 20 years.

Land acquisition actions would have a beneficial impact on cultural resources. Five significant historic site complexes located in the river canyons would be acquired. These sites are important not only for their scientific research potential but for the outstanding recreational/aesthetic values they possess. Acquisition of private lands removes the possibility that sites on those lands would be disturbed or destroyed as a result of commercial recreational development.

Stabilization of 8 historic structures within the river canyons (5 on private lands, 3 on BLM lands), would have a substantial beneficial impact on cultural resources by reducing the current deterioration of significant properties, enhancing the aesthetic qualities of the area for visitors, and preserving scientific information on historic settlement patterns and lifeways for future study.

Within suitable areas, livestock use would remain at approximately current levels, but redistribution of livestock following implementation of grazing systems would disperse livestock over a broader area and slightly reduce livestock trampling of cultural resources.

Vegetative manipulation, installation of range improvements (reservoirs and fences) and construction of recreational facilities (toilets, kiosks and signs) are all actions which have potential to disturb or destroy cultural resources which lie within their immediate impact areas. Should a significant site be discovered during any of these actions, potential impacts would be mitigated in advance of project construction after consultation with the State Historic Preservation Officer. Appropriate mitigating measures might include avoidance of a site by relocating or not authorizing a project, modification of a project to eliminate impacts, test or salvage excavation of endangered portions of a site, or merely recording a site. Once mitigation has been determined, project implementation is normally considered to have no impact on cultural resources.

Nonsuitable Area

Improving the road through private land at Twelve Mile would allow for a moderate localized increase in theft and vandalism of cultural resources in a formerly little-visited area. Acquisition of a 280 acre recreation easement at Twelve Mile would benefit cultural resources by removing the possibility that sites within the easement would be disturbed or destroyed as a result of commercial recreational development. Acquisition of this easement would also allow BLM to reduce deterioration of historic structures at Twelve Mile through stabilization and protection.

Livestock use on nonsuitable areas would decrease about 1% overall and damages to cultural resources as a result of reduced trampling and related erosion would decrease slightly. Additional slight decreases in trampling would occur following implementation of grazing systems which would redistribute impacts over a broader area.

Moderately increased localized levels of vandalism and theft of cultural resources would occur as a result of development of new vehicle ways (access roads) associated with the new powerlines in the vicinity of Twelve Mile in Nevada. Slight short-term (nine to twelve months) localized increased vandalism and theft of cultural resources would also occur in the vicinity of the access roads to three oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting sites in Oregon.

Vegetative manipulation (burning and plowing and seeding with rangeland drills) installation of range improvements (reservoir and fence construction) construction of a pipeline adjacent to the existing El Paso Gas Pipeline, and construction of recreational facilities (toilets, kiosks and signs) are all actions which have potential to disturb or destroy cultural resources. However, all of these actions would be satisfactorily mitigated through normal compliance procedures and therefore would have no impact on cultural resources.

Conclusion

Within the suitable area, vandalism and theft of cultural resources would be reduced by road and way closures. Increases in boating use would lead to increased levels of vandalism and theft in the river canyon areas over time. Acquisition of private lands containing five historic sites, and stabilization and protection of structures at those sites plus three sites on BLM lands would reduce the deterioration of significant resources and enhance the recreational/aesthetic experience for river users. Livestock would be distributed over a broader area and trampling of sites would be reduced slightly.

In the nonsuitable area, acquisition of a 280 acre recreation easement at Twelve Mile would allow protection of a significant historic site. Livestock use would be reduced slightly and distributed over a broader area and trampling of sites would be reduced slightly. Moderate localized increases in vandalism and theft at cultural sites would occur as a result of road improvement through private land at Twelve Mile in Nevada and as result of

new access roads associated with powerline development in Nevada. Slight short-term (nine to twelve months) localized increases in vandalism and theft would occur in the vicinity of the access roads to the oil and gas exploratory drill sites in Oregon and Idaho and the mineral prospecting sites in Oregon.

IMPACTS TO THE CONDITION AND AMOUNT OF NATIVE VEGETATION

Suitable Area

Several sensitive plant sites would come under federal jurisdiction and protection as a result of land acquisition or exchange actions. Hedgehog cactus (Echinocactus simponsi), Inch-High Lupine (Lupine uncialus) and Bailey's Ivesia (Ivesia baileyi) are known to occur on state and private lands that are proposed for acquisition or exchange. There would be no impacts to these species from wilderness designation since there are no management actions which would affect these plants.

Development and use of two boating launch sites would impact vegetation in the canyons. Vegetation would be removed during construction of toilets and kiosks at these sites. Increases in recreation use would increase trampling and result in the establishment of trails and tent pads in the vicinity of the sites. Vegetative cover in the vicinity of the two launch sites would be lost over the long term on a total of five acres.

Increased recreation use would affect vegetation along two sections of river canyons; the upper South Fork Owyhee River in WSA NV-010-106 and the middle section of the Owyhee River in WSA OR-3-195. In these river sections, increased boating use combined with limited campsite availability would result in trampling and loss of vegetative cover on a total of five acres at the campsites.

Maintenance of the irrigation dam servicing the "45" Ranch on the South Fork Owyhee River would result in minimal disturbance. The established road would be used to move any needed equipment to the site. A small area of less than two acres has been set aside to provide fill for dam maintenance and vegetation at this site would be lost.

Livestock grazing use would remain at approximately predesignation levels. To restore or maintain the ecological condition of vegetation, management actions call for prescribed burning on areas in poor and fair ecological condition and improving livestock grazing systems. Areas in good ecological condition (106,710 acres) would not be treated.

Prescribed burning on 15,200 acres would reduce the shrub component and increase the grass/forb component in native plant communities and restore a more natural vegetative mosaic of open grassy areas (principally Idaho fescue and bluebunch wheatgrass) intermixed with areas containing various ages of low and big sagebrush species. Areas to be treated are big sagebrush ecological sites on the plateau. The existing amount of big sagebrush on the plateau would decrease significantly compared to low sagebrush. A rapid

upward trend in condition would occur since livestock grazing pressure (AUMs) would not be increased as the native species are reestablished and regain dominance. Over time, and with continued livestock grazing, it is projected that the plant community would return to what presently exists on the proposed burn sites, mainly sagebrush. The time interval needed between rehabilitation efforts to retain a desired mosaic would be 20 to 30 years.

Improved grazing systems would allow an increase in the abundance and vigor of grasses and forbs by controlling the season of use for livestock. Since livestock use would remain at approximately the same levels occurring at the time of designation and more forage would be available, grazing pressure would be reduced and overall livestock utilization of native plant communities would decrease in the long term. The increased abundance and vigor of grass and forb species would also reduce the susceptibility of areas to sagebrush encroachment. The ecological condition of native plant communities would generally improve with improved grazing systems. The current poor or fair ecological conditions on 185,200 acres of native plant communities across the plateau and in small areas of the canyons would improve. Canyon and plateau areas in good ecological condition (approximately 106,710 acres) would remain in stable condition (Table IV-14).

TABLE IV-14

IMPACTS TO ECOLOGICAL CONDITION OF NATIVE VEGETATION
FROM THE WILDLIFE (BIGHORN SHEEP) WILDERNESS ALTERNATIVE (BLM ACRES)

	Suitable Area		Nonsuitable Area		
	Ecological Condition		Ecological Condition		
WSA	Good Condition Retained	Poor/Fair Condition Improved[1]	Good Condition Retained	Poor/Fair Condition Improved	Native Vegetation Displaced
OR-3-195	57,200	56,470	4,550	71,230	1,250
ID-16-48B	12,850	20,550	0	300	0
ID-16-48C	2,290	6,170	4,075	9,890	2,175
ID-16-49A	10,035	45,495	0	14,735	575
ID-16-49D	2,390	7,160	0	365	75
ID-111-49E	2,375	24,005	0	5,580	0
ID-16-52	4,110	5,820	160	2,885	175
ID-16-53	13,760	17,780	800	7,770	2,400
NV-010-103A	1,700	1,750	0	4,392	0
NV-010-106	0	0	2,800	19,075	0
TOTALS	106,710	185,200	12,385	136,222	6,650

[1] Includes 1,100 non-WSA acres.

Of the 75.8 miles of vehicle routes closed to motorized recreation, native vegetation on 34.9 miles would partially recover and native perennial grass species would reestablish and dominate the wheel tracks. Native shrub species would not be expected to become established in the wheel tracks because of periodic crushing by maintenance vehicles associated with rangeland project maintenance. The remaining roads/ways (46.9 miles) would not have any vehicle traffic and would fully return to native species including sagebrush. Construction of four new reservoirs would eliminate the vegetation on eight acres (Table II-8).

Nonsuitable Area

Prescribed burning would occur on 13,300 acres of big sagebrush sites across the nonsuitable plateau. Following burning on the 13,300 acres, it is projected that about 50% of the burned areas would be seeded to non-native species. The grass/forb composition of the vegetation communities would increase and result in a vegetative mosaic of open grassy areas intermixed with areas containing various ages of low and big sagebrush. Therefore, about 6,650 acres of big sagebrush on the plateau would be displaced by non-native grass species, mostly on the Idaho WSA lands south of the Owyhee River and East Fork Owyhee River.

On untreated areas (both big and low sagebrush ecological sites) across the nonsuitable plateau, improved livestock grazing systems would redistribute livestock use and increase the abundance and vigor of native grasses (principally Idaho fescue and bluebunch wheatgrass) and forbs. The increased amount of native grasses and forbs, together with the increased non-native grasses following burning and seeding, would not be available for livestock (no increased livestock use). Utilization levels of up to 50% (by weight) would be allowed and livestock use would decrease 1%. The abundance and vigor of native grasses and forbs would increase similar to that described for the suitable area. Within the nonsuitable areas, the current poor or fair ecological conditions of native plant communities on the plateau (about 136,222 acres) would improve. Plateau areas with crested wheatgrass or Siberia wheatgrass seedings would show an encroachment of sagebrush. Canyon and plateau areas in good ecological condition (approximately 12,385 acres) would remain in stable condition.

Construction of six new reservoirs in the nonsuitable area would result in the loss of twelve acres of native vegetation.

A new pipeline in the El Paso corridor would disturb a 25 foot wide strip about 8 miles long within WSAs ID-16-49D, ID-111-49E and NV-010-103A. The pipeline strip would be mechanically altered with half the acreage (eastern half) rehabilitated and returned to native species in a three to five year period with sagebrush canopy cover returning within 20 years. A regularly maintained dirt road would be constructed along the west side of the pipeline. The maintenance of the new pipeline road is expected to permanently remove 12 acres of native vegetation. Regular maintenance and inspection actions are expected to keep the roadway clear of vegetation.

Development of the Twelve Mile Corridor in WSA NV-010-106 projects two paralleling high voltage powerlines constructed approximately one mile apart. At least 27 towers would be constructed within the WSA complex. Approximately 15 acres of native vegetation would be disturbed or removed during construction of the towers. Vegetation would be permanently lost on 1 1/2 acres. Full vegetative recovery on 13 1/2 disturbed acres would occur in 20 years. No new roads would be built, but each powerline would have a vehicle way developed to facilitate line inspection and maintenance. Vegetation disturbance on these ways would be substantial during the construction period. Within five to ten years after powerline construction, native vegetation would reclaim these ways except in the wheel tracks where shrubs would not become reestablished.

Oil and gas exploration actions would have only short-term impacts on native vegetation. Seismic testing with specialized vehicles would impact or "thump" the ground to obtain seismic readings. These vehicles would travel cross-country when necessary in a three to five mile wide grid pattern. Wheel tracks would remain behind, but vegetation would recover within three to five years depending on climatic conditions. Exploratory drillings would disturb a total of 30 acres of native vegetation at three sites in WSAs OR-3-195, ID-16-48C and ID-16-49A. The sites would remain disturbed for a period of nine months to one year. Following the completion of exploration activities, topsoil at the sites would be replaced and the disturbed areas seeded to native vegetation. Within five years all three sites would be rehabilitated with native vegetation, including the ways, with a mixture of grasses and shrubs. Complete restoration of the sagebrush canopy would take from ten to 20 years.

Mineral prospecting would eliminate a total of two acres of native vegetation on two sites. The sites would be rehabilitated (recontoured and seeded) following prospecting. Reestablishment of vegetation would take up to 20 years.

Conclusion

In the suitable area, prescribed burning, maintenance of present livestock levels, and improved grazing systems would cause good condition native vegetation (106,710 acres) to remain stable and 185,200 acres of poor/fair condition native vegetation to improve. Native vegetation would partially recover along 34.9 miles and would fully recover along 46.9 miles of roads/ways closed to motorized recreation use. Ten acres of vegetation would be lost at boating launch sites and along the upper South Fork Owyhee River and the middle section of the Owyhee River due to increased recreation use. Two acres of vegetation would be lost through the "45" Dam maintenance. Loss of eight acres of vegetation would occur from construction of four reservoirs.

In the nonsuitable areas, poor/fair condition native vegetation (136,222 acres) would improve and good condition native vegetation (12,385 acres) would remain stable. Prescribed burning would occur on 13,300 acres of which 6,650 acres would be displaced by non-native species. Native vegetation would be permanently lost on approximately 12 acres of the total 25 acres

disturbed by the establishment of a new pipeline/maintenance road within the El Paso corridor. Within the Twelve Mile corridor, 1 1/2 acres of native vegetation would be permanently lost and 13 1/2 disturbed acres would recover in 20 years. Oil and gas exploration would displace a total of 30 acres, but rehabilitation of the disturbed sites would occur in five to 20 years. Mineral prospecting would disturb two acres with recovery projected within 20 years. Loss of 12 acres of vegetation would occur from construction of six reservoirs.

IMPACTS TO THE LEVEL OF SELECTED WILDLIFE POPULATIONS

Suitable Area

Acquisition of 12,440 acres of non-federal lands would enhance management and protection of mule deer, pronghorn, sage grouse and redband trout by preventing potential conflicting uses which could adversely impact these wildlife populations or their habitats.

Closure of 75.8 miles of roads and ways would reduce motorized recreation use and hunting pressure on mule deer, pronghorn and sage grouse. The road closures would also reduce human disturbance associated with motorized vehicles and stress on the animals would be reduced. Since public access would be restricted to only a few routes, disturbance and hunting pressure would primarily occur in these few areas. Mule deer in particular would be disturbed less from closure of access routes which lead to the canyon rim or river. The closed vehicle routes would partially or fully revegetate but overall wildlife habitat would not be measurably affected. Although disturbance and hunting pressure would be reduced, wildlife populations are not projected to change over the long term because of road closures.

Burning 15,200 acres would benefit mule deer, pronghorn and sage grouse. The burns would open up dense sagebrush stands and allow native grasses and forbs to increase. Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox and other forbs would increase. The edge affect created by the fire would also provide escape, loafing and nesting cover (Wright and Bailey 1982). The improved range condition on the plateau would increase wildlife forage availability and improve overall habitat conditions (forage/cover ratio) for pronghorn, mule deer and sage grouse. Sage grouse habitat and populations would also improve from this increase in forage and opening of dense sagebrush stands, particularly during the spring and summer months. The increase of forbs and grasses would increase the food available to sage grouse broods (Blaisdell 1953). As a result of the burning and opening up of dense sagebrush stands, an estimated increase of 15-20% in mule deer and pronghorn numbers is projected. Sage grouse populations would increase by an estimated 10-15%.

Construction of four new reservoirs and three miles of fence would affect mule deer and pronghorn. The new reservoirs and fences would allow for improved grazing systems which would redistribute livestock. This would allow for more even utilization of forage by livestock on the plateaus which would improve the ecological condition of plant communities and increase

forage availability for wildlife. Reservoirs would contain water in their impoundments which would be available to wildlife well after natural water sources dry up during the late summer months. This would reduce stress on the animals by reducing their traveling distance to alternate water sources. The new reservoirs would also allow wildlife to inhabit previously underutilized areas during this time. New fences would have a minimal impact on wildlife movement since new fences would be constructed to allow for wildlife passage.

Nonsuitable Area

Acquisition of 14,300 acres of non-federal Idaho state lands would enhance management and protection of mule deer, pronghorn, redband trout and sage grouse by preventing potential conflicting uses which could adversely impact these wildlife populations and their habitats. Acquisition of a recreation easement on 280 acres of private land at Twelve Mile in WSA NV-010-106 would prevent potential development of intensively managed recreation facilities, such as commercial lodges or resorts, which could adversely impact mule deer, pronghorn, sage grouse and redband trout populations and habitats as a result of development and increased human traffic. Although management opportunities would be generally enhanced through acquisition, no specific wildlife habitat improvement projects are proposed and wildlife habitat is not projected to change substantially. Therefore, wildlife populations are not projected to increase solely because of acquisition.

Land treatment projects on 13,300 acres would improve forage and cover for mule deer, pronghorn and sage grouse populations as in the suitable areas. Decreased livestock use (1%) would slightly decrease competition between livestock and wildlife for the additional forage created by burning and seeding. Construction of new rangeland facilities (six reservoirs and six miles of fence) would have the same impact to wildlife populations as described in the suitable area. As a result of the improved habitat on 13,300 acres and a decrease in competition from decreased livestock use, mule deer and pronghorn populations are projected to increase by 15% in the nonsuitable area from rangeland management actions. Sage grouse populations would remain stable or increase up to 10% in the nonsuitable area.

Construction of a pipeline in the El Paso corridor and a powerline in the Twelve Mile corridor would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse the same as in the Proposed Action. Pipeline and powerline construction would each last 1 1/2 months. Since habitat changes would be minimal, population levels would not be affected.

Oil and gas exploration activities on nonsuitable plateau lands would effect mule deer, pronghorn and sage grouse, the same as in the Proposed Action. Stipulations on oil and gas leases would minimize impacts by prohibiting activity during the times when mule deer, pronghorn and sage grouse populations are most sensitive to human activity. These times correspond to mule deer use on winter range, pronghorn use on winter and fawning ranges and sage grouse use on winter range, breeding grounds and nesting/brood rearing areas. The ten acre disturbed area associated with

each of three exploration sites would be temporarily avoided by mule deer, pronghorn and sage grouse using the area. It would take between three to five years for the site to return to native vegetation cover and for wildlife populations to fully reinhabit the disturbed sites. This temporary and relatively small reduction of habitat would not affect population levels. Overall, wildlife population levels would not be impacted by oil and gas exploration activities.

Human activity associated with mineral prospecting at two sites would cause localized disturbance and displacement of mule deer, pronghorn and sage grouse for up to one year, but would not impact populations. Loss of vegetation at these sites would not impact wildlife populations.

Redband trout would not be impacted because of the proximity of the two mining sites to the West Fork Little Owyhee River.

Conclusion

Land acquisition would benefit mule deer, pronghorn, sage grouse and redband trout by eliminating potential resource conflicts. Road and way closures would reduce disturbance to wildlife populations, especially along the canyon rims. Rangeland management actions on suitable lands would increase mule deer and pronghorn populations by 15-20% and sage grouse populations by 10-15%.

Land acquisition of nonsuitable lands would benefit wildlife by eliminating potential resource conflicts. Mule deer and pronghorn populations would increase 15% and sage grouse populations would remain stable or increase up to 10% as a result of rangeland management actions. Utility corridor actions, oil and gas exploration and mineral prospecting on nonsuitable lands would cause short term disturbance and displacement of mule deer, pronghorn and sage grouse inhabiting the impact area.

IMPACTS TO THE LEVEL OF SEMI-PRIMITIVE RECREATION

Suitable Area

Of the 12,440 acres of non-federal lands recommended for acquisition, 880 acres are private lands presently accessed by motor vehicles for semi-primitive recreation activities (principally vehicle camping, hunting, sightseeing and some fishing). Only the road to 160 acres of these private lands at Crutcher's Crossing (a boating launch site) between WSAs ID-16-48B and ID-16-49A would be maintained. The other lands have roads which would be closed to motorized recreation use, specifically the roads into Five Bar (WSA OR-3-195), Battle Creek confluence (WSAs ID-16-49A/ID-111-49E/ID-16-49D), and Coyote Hole (WSA ID-16-53).

There are a total of 13 miles of boundary roads separating the Owyhee Canyonlands WSAs. Within the WSAs are 38.4 miles of cherrystem roads and 114.3 miles of ways (two-wheel tracks). A wilderness designation would result in the closure of 75.8 miles (50%) of the roads and ways currently

used for semi-primitive motorized recreation use which lead to the interior plateau, canyons or isolated locations along the canyon rimrocks (Table II-3 and IV-4). Recreation users dependent upon motor vehicle transportation would lose opportunities for semi-primitive activities.

Some motorized hunting activities would be displaced to adjacent areas because of road closures. Many big game hunters are projected to continue to pursue mule deer, pronghorn antelope, and bighorn sheep in the area, even if vehicle use is restricted. The big game road hunters would change to hunting on foot or horseback. Bird hunters would not tend to switch to foot or horseback. Chukar hunting within the canyons would be reduced because of access restrictions to rimrock areas. The road and way closures would also eliminate sage grouse hunting on interior plateau areas. Overall, motorized hunting opportunities within the suitable area would be reduced substantially. However, there are many areas around the WSAs as well as the entire high plateau country of Oregon, Idaho and Nevada where motorized hunting activities associated with plateau areas are of equal or greater quality. Therefore, road closures would slightly reduce motorized hunting opportunities in the three-state area as a whole.

Rock hounds are highly dependent upon road access to sources of gem stones in the canyons. Eliminating many of the vehicle routes to rimrock areas would greatly restrict collection opportunities, however, opportunities exist elsewhere in the three-state area.

Some people use the Owyhee Canyonlands area primarily for motorized sightseeing and vehicle camping. Some of the scenic overlooks and vehicle camping sites located at or near the end of cherrystem roads and ways would not be accessible to sightseers and campers by motorized vehicles because of road closures. However, vehicle routes into the canyons between the WSAs would remain open and continue to permit scenic views of the canyons and allow vehicle camping within the canyons. The established scenic overlook site along the northern neck of Oregon WSA OR-3-195 would remain open for vehicle access. A number of undeveloped canyon rimrock overlook and camping sites in Oregon, Idaho and Nevada would remain accessible because existing WSA boundary roads reach to the canyon rims or within several hundred feet of the rims. Though some sites would be closed to motor vehicle access, sufficient sites would remain accessible to satisfy projected demand. Overall, semi-primitive motorized sightseeing and camping opportunities would be slightly reduced.

Closure of the suitable area to motor vehicle use would not have a notable impact upon recreationists who drive motor vehicles off of roads and ways. Off-road vehicle (ORV) opportunities in the WSAs are minimal because of natural terrain or surface structure limitations. Little ORV use currently exists except when necessary for hunting because of the ample availability of areas closer to population centers.

The Wildlife (Bighorn Sheep) Wilderness Alternative calls for maintaining the major road access to the boating launch sites between the WSAs as well as providing some minimal facilities (toilets) at the sites. Semi-primitive motorized recreation use associated with these access roads would continue.

The roads would provide opportunities for recreation users to reach the river canyons for hunting as well as allow some opportunity for sightseeing, rock hounding and vehicle camping.

Nonsuitable Area

Acquisition of non-federal lands would have no impact on the level of semi-primitive recreation use on nonsuitable lands other than a slight increase in semi-primitive motorized recreation opportunities resulting from acquisition of a recreation easement at Twelve Mile in WSA NV-010-106. This easement would allow for public access into the Twelve Mile boating launch site on private property.

Upgrading the access road into the boating launch site at Twelve Mile in WSA NV-010-106 and constructing toilets and kiosks at the site would increase motorized recreation opportunities by making the site easier to drive to and a more desirable destination.

Development of the Twelve Mile corridor would result in the establishment of vehicle tracks along two powerlines leading from the east and west boundaries of WSA NV-010-106 to the canyon rimrocks of the South Fork Owyhee River. These routes would provide hunters, rock hounds and sightseers with new recreation opportunities. Development of the El Paso corridor would result in a new pipeline and accompanying maintenance road in WSAs ID-16-49D, ID-111-49E and NV-010-103A. However, this new road would be only 50 feet from the existing road along the El Paso Gas Pipeline and, therefore, would not increase recreation use or opportunities.

Oil and gas exploration activities would generate a number of miles of temporary two-track vehicle access routes in WSA OR-3-195, ID-16-48C and ID-16-49A which would be fully rehabilitated following exploration and not open to motorized recreation use.

Conclusion

Wilderness designation would result in the closure of 75.8 miles of vehicle routes on suitable lands. Non-federal land acquisition associated with suitable WSA lands would also result in some additional road closures between and within WSAs. These closures would reduce semi-primitive motorized recreation opportunities on the plateau and in some canyon areas. Maintenance of existing river access roads to boating launch sites between the WSAs would ensure continued use of these canyon areas.

The addition of the Twelve Mile access road and river launch site on private lands in WSA NV-010-106 would slightly improve semi-primitive motorized recreation opportunities. Utility corridor development in Nevada WSA NV-010-106 would slightly increase semi-primitive motorized recreation opportunities.

Within 20 years, hunting is projected to reach 2,600 user days annually while use for other activities (sightseeing, rock hounding and vehicle camping) is projected to reach only 245 user days (Table IV-2).

IMPACTS TO THE LEVEL OF LIVESTOCK USE

Suitable Area

Maintenance of existing rangeland facilities would continue. Motorized vehicle use on 75.8 miles of roads and ways closed to motorized recreation would be controlled to allow for facility maintenance and construction. Bulldozers would be used for reservoir maintenance and construction. Motorized vehicles would be used for fence maintenance once each year at the beginning of the grazing season. Salting, livestock monitoring and allotment supervision would be conducted by horseback. Four new reservoirs and three miles of fence would be constructed (Table II-8). Livestock grazing would decrease by up to 1%.

Nonsuitable Area

Full use of motorized vehicles would be allowed for general livestock management and to maintain and construct rangeland facilities. Six reservoirs and six miles of fence would be constructed. Estimated livestock use within affected allotments would increase by 6,482 AUMs (230,319 AUMs to 236,801 AUMs) in 20 years. This would be a 3% increase over the current active preference for all allotments (Table IV-5). Estimated livestock use within the WSA boundaries would decrease by 147 AUMs in 20 years (1% decrease) (Table IV-6).

Conclusion

Motorized use would be restricted on 75.8 miles of roads and ways in suitable areas. Livestock use within the affected allotments would increase 6,482 AUMs (3%). Livestock use within the WSA boundaries would decrease 147 AUMs (1%). No increased livestock use would occur in suitable or nonsuitable areas. Four reservoirs and three miles of fence would be constructed in the suitable area, and six reservoirs and six miles of fence would be constructed in the nonsuitable area.

IMPACTS ON THE LEVEL OF SOIL EROSION

Suitable Area

Road and way closures (Table II-3) would affect the soil resource. It is estimated that the current soil loss from these sources is over 400 tons/year. Since these areas would be closed to motorized recreation and no longer subject to mechanical disturbance (except for occasional use for maintaining rangeland facilities), they would revegetate and soil loss would decrease to about 250 tons/year.

Rangeland burning with or without seeding is projected for 15,200 acres. The 1,520 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As

vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

Nonsuitable Area

Rangeland burning with or without seeding is projected for 13,300 acres. The 1,330 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

Livestock increases in WSAs ID-16-48C (52%) and ID-16-53 (36%) would affect the soil resource through reduction of vegetative cover and increased trampling resulting in increased erosion and compaction. Improved grazing systems (including the proposed range improvement projects) would improve range condition which would tend to reduce soil erosion. Soil erosion is projected to increase 15% to 25% (0.3 to 0.5 tons/acre/year) in WSA ID-16-48C and 10% to 20% (0.2 to 0.4 tons/acre/year) in WSA ID-16-53.

Livestock decreases in WSAs NV-16-53 and NV-010-106 (52%) combined with improved grazing systems would improve range condition which would reduce soil erosion. Erosion rates in these areas are projected to decrease 20% to 25% (0.4 to 0.5 tons/acre/year). Erosion rates in the other WSAs would remain relatively unaffected.

Pipeline construction would cause short-term (one to two years) impacts consisting of compaction, mixing of soil layers, and loss of vegetative cover. The maintenance road to be constructed in association with the El Paso corridor would produce about 17.5 tons/year of soil loss.

Oil and gas exploratory drilling is projected to occur at three locations (Maps 6B through 6D). Soil compaction and loss of vegetative cover would result from these operations. A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic to vegetation and act as a soil sterilant. Areas affected would be small (less than ten acres per site) and would rehabilitate in three to five years.

Mineral prospecting is projected in WSA OR-3-195 at two sites (Map 6B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and slightly increase sediment loads into nearby waterways. Toxic substances could be brought to the surface making the soil

around the tailings pile sterile and retarding revegetation. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

In the suitable area, broad based erosion rates would decrease by about 5% to 10% (0.1 to 0.2 tons/acre/year) under the current rate of 2.0 tons/acre/year.

In the nonsuitable area, broad based erosion rates would decrease by about 5% (0.1 tons/acre/year) under the current rate of 2.0 tons/acre/year.

IMPACTS TO WATER QUALITY

Suitable Area

Road and way closures (See Table II-3) would maintain or improve water quality since these areas would revegetate and decrease possible sediment delivery to streams from these sources.

Rangeland improvement projects along with improved grazing systems would improve the range condition and decrease broad based soil erosion. This would decrease the amount of sediment delivery to waterways by up to 5%.

Nonsuitable Area

Oil and gas exploratory drilling is projected to occur at three locations (Maps 6B through 6D). A one acre waste pit would be built near each well to contain drilling muds and formation fluids. Fluids used in the drilling operation or brought to the surface may be toxic and in the remote event that these substances accidently enter waterways, water quality would be adversely affected.

Mineral prospecting is projected in WSA OR-3-195 at two sites (Map 6B). About one acre of surface disturbance is projected at each site. No roads would be constructed to the exploration sites. Following exploration and prior to rehabilitation of disturbed areas, mine tailings and bare soils would erode naturally and slightly increase sediment loads and degrade water quality in nearby waterways. Toxic substances could be brought to the surface and could enter waterways and degrade water quality. Revegetation of the disturbed areas could take up to 20 years.

Conclusion

Suspended sediment loads would be reduced by up to 5% in suitable and nonsuitable areas. There is a remote possibility of toxic materials from oil and gas exploration and mineral prospecting adversely affecting water quality in nonsuitable areas.

IMPACTS ON LOCAL INCOME AND JOBS

The AUMs available in the affected allotments in 20 years could result in an annual income of $2.4 million. This would be a 25% increase over the present situation (1982 licensed actual use). Recreation use in the WSAs projected in 20 years would result in annual income of $552,000 which is a 303% increase over the present situation.

Employment related to the available AUMs would be 67 jobs in 20 years. There would be 139 jobs in 20 years associated with the projected recreation use. These would be increases of 25% and 163% respectively.

The total income and employment impacts (in 20 years) from this alternative would be $3.0 million and 206 jobs. These would represent 0.9% and 0.7% of the 1981 local personal income and employment respectively. The total increase in income (above existing situation) would be $1.0 million or 0.3% of the 1981 local personal income. The total increase in employment would be 100 jobs or 0.3% of the 1981 employment in the local economy. These increases would be insignificant to the local economy.

Conclusion

The Wildlife (Bighorn Sheep) Wilderness Alternative would result in a 0.3% increase in personal income and a 0.3% increase in employment over 20 years in the three-county area.

ALL WILDERNESS ALTERNATIVE

Under the All Wilderness Alternative, 450,272 acres of public land in eight WSAs in Oregon, Idaho and Nevada (including 4,205 acres of non-WSA lands) are recommended suitable for wilderness designation.

IMPACTS TO WILDERNESS VALUES

Naturalness

Suitable Area

Land acquisition efforts are projected to add 16,060 acres to the suitable area. Acquisition of these lands would protect existing naturalness by ensuring against potential uses that could reduce naturalness. These lands have the potential for conflicting uses including the development of intensively managed recreation facilities (commercial lodges or resorts), irrigation diversions, cultivated pastures and exploration for energy and mineral resources. A wilderness designation would increase the likelihood that interlocked private lands within the river canyons would be developed for recreational purposes because of the increased notoriety of the area.

River recreation use is projected to reach 11,000 user days per annually within 20 years, a 500% increase over current use. This use would occur from about 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks during the 92 days within the carrying capacity monitoring period (April 1 through June 30 of each year).

The projected trip starts on the upper Owyhee River system (above Three Forks, Oregon) would result in about 525 campsite uses per year in 20 years, a 350% increase over current use. There are several hundred campsites along the river above Three Forks which is adequate to satisfy this projected demand without overcrowding. Because of the adequate supply of campsites, increased river recreation use is projected to only slightly reduce or change vegetative cover from trampling at the upper river campsites, (except in Nevada). The trampled vegetation would be a minimal visual impact which would reduce naturalness in the vicinity of the campsites. Therefore, impacts to naturalness at the upper river campsites from increased river recreation use are projected to be minimal, (except in Nevada).

In the upper reaches of the South Fork Owyhee River and the southern periphery of WSA ID-16-53 (NV-010-103A), campsites are extremely limited. Based on projected river use levels and historic use patterns on the upper river system, it is projected that the principal South Fork launch site at the "YP" Ranch would exceed its carrying capacity of one start per day within 20 Years. Such a launch schedule would generate almost daily use of the few campsites in WSA NV-010-106 during the boating season. This projected frequency of campsite use on the South Fork Owyhee River in WSA ID-16-53 (NV-1010-103A) would cause trampling of vegetation and development of trails around the sites which would locally reduce naturalness.

Campsites along the middle Owyhee River (between Three Forks and Rome, Oregon) are limited (23 campsites) because of the steep slopes and narrow rocky canyon. A total of 194 trips per year, an increase of 325% over current use, would increase trampling of vegetation in these campsite areas. Management under the concept of the Limits of Acceptable Change (General Technical Report INT-176, Stankey 1985), which would include issuing permits and encouraging alternate campsites, would limit trampling of vegetation (changes in natural character) to less than significant. Therefore, increased river recreation use would not significantly impact naturalness of the middle Owyhee River campsites.

Development and use of two boating launch sites would impact the natural landscape on a total of five acres. Facility construction (toilets and kiosks) would result in soil disturbance, however, revegetation of disturbed areas would occur within three years. Increased visitor use would result in the establishment of on site trails and tent pads. Toilets and kiosks would remain over the long term and would be a visual impact which would reduce naturalness in the immediate vicinity. Therefore, development and use of boating launch sites would cause minimal localized impacts to naturalness on a total of five acres.

The "45" Dam on the South Fork Owyhee River would be maintained to provide boater passage and irrigation water to private pasture lands along the South Fork Owyhee River between WSAs ID-16-48B and 16-53. Although not within a WSA, the dam and borrow pit area (two acres used for dam maintenance) are visible from the northernmost canyon area of WSA ID-16-53. Dam maintenance (replacement of dislodged rock material) would not change the appearance of the dam but would prevent revegetation of the borrow pit over the long term. The adverse visual impacts of the dam and borrow pit (vegetation removed or disturbed) would continue to cause localized reductions in naturalness over the long term on about two acres within the South Fork Canyon.

Stabilization of historic stone and wood buildings along the river system (mortaring, applying wood preservative, and re-roofing with timbers and sod) would prevent further deterioration and allow these structures to remain in place. The original design and appearance of the structures would be restored and maintained. The stabilization would not cause any additional impacts to naturalness along the river system.

Closure of 152.7 miles of roads and ways to motorized recreation use would affect naturalness. Nonuse of vehicle routes would result in the revegetation of roadbeds and wheel tracks with both grass and shrub species (primarily sagebrush) within 20 years. None of the six miles of roads and ways within the canyons are expected to have vehicle use. Though roads and ways would be closed to general public recreation use, some routes on the plateau would continue to be periodically used by livestock permittees to maintain reservoirs and fences. Based upon the geographical distribution of roads and ways and the expected need to maintain reservoirs and fences, it is projected that less than 50% of the vehicle routes on the plateau would be periodically used for this purpose. Tracking bulldozers on these roads and ways would crush the vegetation and several years would be required for

recovery. Periodic use of roads and ways would allow the wheel tracks to be revegetated with native grass species, however, even minimal use would inhibit revegetation of wheel tracks by brush species (sagebrush). The tracks would remain noticeable on the terrain at close distances for over 20 years. Because of the flatness of the terrain, the 146.7 miles of vehicle routes on the plateau are largely unnoticeable over the WSA lands as a whole. Therefore, the partial or complete revegetation of roads and ways would slightly enhance naturalness as a whole and moderately improve the natural character of the plateau. Of the total 152.7 miles of roads and ways closed to general public recreation use, 79.4 miles would fully revegetate (grass/shrubs), while 73.3 miles would only partially revegetate (grass). Consequently, road closures would have a beneficial impact on naturalness along 153 miles of roads and ways.

The projected 500% increase in annual boating use levels (11,000 user days) combined with the 122% increase in land-based recreation activities (4,215 user days in suitable area) would increase vehicle traffic on the river access roads which would remain open. Since the access roads would be maintained to existing standards, this increased vehicle traffic would not change the visual appearance of the access roads nor add to the existing visual impact that these roads have on naturalness. Therefore, there would be no impact on naturalness from increased vehicle traffic on river access roads.

Of the total 4,215 user days projected annually for land-based recreation activities, 1,800 user days are projected for backpacking activities. This primitive recreation use would be dispersed throughout the canyons and immediately adjacent plateau rimrock areas and would have no impact on naturalness.

Maintaining and reconstructing existing rangeland management facilities (reservoirs) would impact naturalness. With a 20-year maintenance cycle for reservoirs (stock ponds), five or six reservoirs would be maintained each year using bulldozers. Reservoir maintenance/reconstruction on some WSA reservoirs under the Interim Management Policy showed that cross-country bulldozer tracks to reservoir sites recovered to a largely unseen condition within five years, and recontouring dams and dirt piles associated with the reservoirs substantially reduced the area in which the reservoirs could be seen and made them appear more like natural features; thereby reducing their impact upon the natural landscape. Localized adverse visual impacts caused by cross-country access to some sites would last from five to ten years and would generally be confined to a small area in any given year. The impacts would consist of crushed sagebrush vegetation running in two parallel lines crossing the plateau landscape which would be visible only if a person is standing on the bulldozer tracks looking up and down their length. They would remain virtually unseen from lands adjacent to the tracks because of screening by sagebrush. Because many of the reservoir sites are accessed by existing boundary roads or roads and ways, cross-country travel impacts from bulldozers would be limited. During the short term, naturalness would be adversely impacted for about five years at each reservoir site that is maintained or reconstructed until vegetation is reestablished. Based upon

these findings, maintenance and reconstruction of reservoirs would result in a reduction in the current adverse visual impact of these reservoirs which would enhance naturalness in the vicinity of the reservoirs over the long term.

Maintenance of other rangeland facilities (fences, springs, pipelines) would continue. There would be no change in the appearance of these facilities and periodic vehicle use by livestock permittees for maintenance would continue to prevent the complete rehabilitation of roads and ways closed to general public recreation use by inhibiting the revegetation of wheel tracks by sagebrush. Therefore, maintenance of other rangeland facilities would not have an increased impact on existing naturalness.

Construction of new rangeland facilities (four reservoirs and nine miles of fenceline) would affect naturalness on 190 acres in WSA OR-3-195 (including actual disturbance areas and visual zones, about 25 acres per reservoir and 10 acres per mile of fence). New reservoirs would be constructed to mitigate their localized adverse visual impacts to naturalness (low, rounded/crescent/oval forms). The visual impacts from the addition of these new facilities would be minimal since they would only be seen from over a small area and would not result in a notable increase impact on naturalness in the suitable area as a whole. In total, construction of new rangeland facilities would cause site specific reductions in naturalness on 190 acres.

Naturalness on the plateau would be impacted through prescribed burning (26,400 acres; 2,640 acres per year average with reburning every 20 to 30 years) and improved grazing systems. Improved grazing systems would change livestock distribution and reduce grazing pressure. The reduced grazing pressure would allow native grasses and forbs to increase in abundance and height which would reduce the grazed appearance. Prescribed burning and subsequent revegetation would further result in fewer shrubs and an additional increase in native grasses and forbs. Since the increased forage (native grasses and forbs) from prescribed burning would not be available to livestock (no increase in livestock use), overall grazing pressure would be reduced. This reduced grazing pressure would allow an additional increase in the abundance and height of native grasses and forbs which would further reduce the grazed appearance. The reductions in the grazed appearance would improve the visual quality (naturalness) of these lands. This improvement in naturalness would be greatest in Idaho where all of the prescribed burning is planned. In Oregon and Nevada, naturalness on the plateau would also improve but to a lesser degree because no prescribed burning would occur. Although there would be a temporary (1 to 2 year) reduction in naturalness from reduced vegetation caused by burning until revegetation occurs, naturalness would be enhanced overall on 316,372 acres from improved grazing systems and on 26,400 acres from prescribed burning.

There would be no mineral prospecting, oil and gas exploration or utility corridor actions in the suitable area that would impact naturalness.

Conclusion

In the suitable area, construction of new reservoirs and fences would permanently reduce naturalness on 190 acres. Over the long term, naturalness within the suitable area would be slightly enhanced along 152.7 miles of road/way closures, enhanced on 26,400 acres from prescribed burning (Idaho), enhanced on 316,372 acres from improved grazing systems and enhanced locally from maintenance of existing reservoirs.

Solitude Opportunities

Suitable Area

Acquisition of 16,060 acres of non-federal lands would ensure that these lands, particularly private lands (2,120 acres) within the river canyons, are not developed or used for activities which could reduce solitude on adjoining WSA lands. Currently all of these lands are used for livestock grazing and occasional recreation. Wilderness designation, and its accompanying notoriety, could result in one or more of the private land parcels in the river canyons (all of which are accessed by roads) being developed as a commercially operated, recreation oriented lodge or resort if the lands are not acquired. Such development could substantially reduce solitude opportunities on a localized basis as human activity increases. Since these lands would be acquired and development would be precluded, opportunities for solitude would not be affected.

River running recreation use is projected to reach 11,000 user days annually (Table IV-2). This use is expected to occur during an optimum 45-day float period sometime between April 1 and June 30 of each year depending upon climate and river flow conditions. The use would occur from 24 trips floating the East Fork Owyhee River, 81 trips floating the South Fork Owyhee River, and 194 trips floating downstream of Three Forks. On an average, this amount of use would equate to one trip starting on the East Fork every two days and on the South Fork about once or twice per day. In a good water year, currently the East Fork gets five trips per year (one launch every nine days); the South Fork gets ten trips (one launch every five days), the main stem Owyhee River gets 35 trips (one launch every one to two days). This change in launch frequency over 20 years would be a 500% to 1000% increase in the potential for recreation user group interaction. Because the rate of travel for each float party would be the same for the East Fork and South Fork, those groups starting from the upper river launch sites (WSA ID-16-49/52 and NV-010-106) would generally not encounter each other while floating on the two forks of the river, except on the upper South Fork in WSAs ID-16-53 (NV-010-103A) and NV-010-106. On this portion of the South Fork, nearly two starts per day projected at the "YP" Ranch at the southern tip of WSA NV-1010-106 would cause a rate of boater interaction which would slightly reduce solitude opportunities until boating groups are able to disperse, usually below mile 22 from the "YP' Ranch site around the Idaho-Nevada border in WSA ID-26-53 (NV-010-103A.

The greatest float group interaction would generally begin on the Owyhee River in WSA ID-16-48B below the confluence of the East-South Forks where boating parties merge together. Presently, the merging of float trips on the Owyhee River results in less than one interaction between parties between the confluence and the Three Forks take-out/put-in. In 20 years, the expected group interaction would increase to five or more on this section of river. Below Three Forks in WSA OR-3-195, a launch schedule of four trips per day would raise group interaction rates from a current rate of less than one per day to four or more per day. Such increases in float group interaction would cause a notable loss in opportunities for solitude.

Backpacking use is projected to reach 1,800 user days annually in canyonlands and associated plateau rimrock areas. About 50% of the backpacking use would occur in the spring when river running activities are also occurring. The remainder of the backpacking use would occur during the fall. Presently, little or no interaction between boaters and hikers occurs due to the minimal amount of use and the fact that backpacking primarily occurs in tributary canyons such as Deep Creek, Battle Creek and Louse Canyon. In 20 years, it is projected that backpacking use would remain largely in tributary canyons. Backpacking/boating group interaction in the river canyons should remain at less than one per trip in the East Fork, South Fork and main stem Owyhee River system, therefore, backpacking use would minimally contribute to reductions in solitude opportunities.

When boaters and backpackers travel the river launch site access roads to reach the canyon areas, they will interact with those engaging in other primitive recreation or semi-primitive recreation experiences (mostly sightseeing in the spring, and mostly hunting in the fall). Semi-primitive recreation use is projected to reach 2,415 user days in 20 years. The combined activities of the boaters/sightseers or backpackers/hunters, etc. at the river launch sites would produce almost daily use of these sites and cause a localized reduction in solitude opportunities at these sites. Construction of minimal recreation facilities at two launch sites (toilets and kiosks) would not contribute to increases in recreation use. The facilities would mitigate public health and safety concerns generated by increased recreation use.

In some canyon areas and on the plateau lands surrounding the canyons, 152.7 miles of roads and ways would be closed to motorized recreation use. These closures would slightly increase solitude opportunities yet few recreationists are expected to benefit from this opportunity because most primitive recreation activities would be occurring in close proximity to the canyon rimrocks away from much of the closed plateau vehicle routes.

Rangeland management actions would have no increased impact on solitude opportunities. These actions include construction and maintenance of rangeland projects (fences and reservoirs) and vegetative manipulation. The amount of human activity associated with these activities, as well as day-to-day grazing system management, is not expected to change enough to affect current opportunities for solitude over the long term.

There would be no mineral prospecting, oil and gas exploration or utility corridor actions in the suitable area that would impact opportunities for solitude.

Conclusion

On suitable lands, a slight increase in solitude opportunities would occur in some canyon areas and across the plateau as a result of closing 152.7 miles of roads and ways to motorized recreation. Notable localized reductions in solitude opportunities are projected in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) and in the South Fork Owyhee River Canyon of WSA ID-16-53 (NV-010-103A) and NV-010-106 due to increased float group interactions. Localized reduction in solitude opportunities are projected at the boating launch sites where vehicle access along maintained roads would concentrate recreation use and cause frequent interaction between visitors.

Primitive Recreation Opportunities

Outstanding primitive recreation experiences exist only on those lands which contain a high degree of naturalness and offer a high degree of solitude opportunities. Changes in either the degree of naturalness or solitude opportunities change primitive recreation opportunities. In the Owyhee Canyonlands WSA complex, opportunities for primitive recreation experiences would change on the same acreage where changes in naturalness or solitude opportunities occur. Naturalness and solitude opportunity impact areas generally coincide with each other except in the canyon areas where solitude impacts occur from recreation user group interaction.

Suitable Area

Acquisition of 16,060 acres of non-federal lands would enhance opportunities for primitive recreation by ensuring that these lands remain natural in character and are not eventually developed with conflicting uses which could reduce opportunities for solitude.

In the canyon areas, a slight localized reduction in primitive recreation opportunities would accompany reductions in solitude opportunities caused by increases in boating group interaction along the Owyhee River in WSA OR-3-195 (ID-16-48B) and the upper South Fork Owyhee River in WSAs ID-16-53 (NV-010-103A) and NV-010-106, and by increased interaction between boaters and others who use the maintained roads into the various boating launch sites.

Maintenance of the "45" Dam would allow the existing localized loss of naturalness in the South Fork Owyhee Canyon at the northern edge of WSA ID-16-53 to continue. This loss of naturalness locally reduces existing primitive recreation opportunities because river runners must scout and run or line/portage an unnatural structure which blocks the otherwise free-flowing river system. Therefore, maintenance of the "45" Dam would not impact the existing level of primitive recreation opportunities.

Stabilization of historic sites (stone buildings and wood cabins) along the river would benefit primitive recreation opportunities by ensuring the continued enjoyment of viewing these structures for their cultural value. Though not natural in character, they stand as examples of how civilization has come and gone from the Owyhee Canyonlands and heighten the sense of harsh conditions and challenge associated with traveling and living in the area.

In some canyon areas and on the plateau, primitive recreation opportunities would be enhanced slightly over the long term as enhanced naturalness (revegetated wheel tracks) and increased solitude opportunities (elimination of motorized recreation) occur from the closure of 152.7 miles of roads and ways.

Rangeland management actions include prescribed burning, implementing grazing systems, and maintaining reservoirs (reconstructing to higher visual standards). Prescribed burning and implementing grazing systems would increase the abundance and height of native grasses and forbs and reduce the grazed appearance which would enhance naturalness across the plateau. Maintaining reservoirs (which would make them appear more like natural features) would reduce their current visual impact and enhance naturalness locally. This enhanced naturalness from rangeland management actions would slightly enhance primitive recreation opportunities on 316,372 acres across the plateau over the long term.

Construction of four new reservoirs and nine miles of fence in WSA OR-3-195 would locally reduce naturalness on 190 acres. This reduced naturalness would also reduce primitive recreation opportunities on the same area.

There would be no mineral prospecting, oil and gas exploration or utility corridor actions in the suitable area that would impact opportunities for primitive recreation.

Conclusion

Primitive recreation opportunities on suitable lands would generally be retained as a whole. A slight enhancement in primitive recreation opportunities would occur across the plateau and in some canyon areas as a result of closing 152.7 miles of roads and ways to motorized recreation use, and across the plateau as a result of prescribed burning, grazing systems and reservoir maintenance. Some localized reduction in primitive recreation opportunities would occur in the Owyhee River Canyon of WSA OR-3-195 (ID-16-48B) and in the South Fork Owyhee River Canyon of WSAs ID-16-53 (NV-010-103A) and NV-010-106 due to projected increases in river boating use. Localized reductions in primitive recreation opportunities would also occur at boating launch sites where vehicle access along maintained roads would concentrate recreation use. Construction of four new reservoirs and nine miles of fence would locally reduce primitive recreation opportunities on 190 acres.

Special Features (Bighorn Sheep)

Suitable Area

Acquisition of land along the Owyhee River, Battle Creek and Deep Creek would enhance management and protection of bighorn sheep. Acquisition would ensure that potential resource uses on these lands would not adversely impact bighorn sheep in adjoining suitable areas.

It is projected that in 20 years river boating use would reach 11,000 user days annually, a 500% increase over present levels. Use on the East Fork Owyhee River would increase from an average of one trip every eight days to one trip every two days during the peak boating period. During the same period, the South Fork would increase to nearly two trips every day. At Three Forks, use would increase to four trips a day. These increases in use would be very gradual, and bighorn sheep would be able to adjust to this increased use because the sheep would primarily be at the upper levels of the canyon walls and the boaters would be down on the river. Sheep were found to be curious of boaters along the Colorado River as long as boaters stayed in the boats (Manson and Summer 1980). Human activity at favorite "camp spots" along the river would cause temporary displacement of sheep in the vicinity of the camp spots while human activity is occurring, but this displacement would be minor and would not effect bighorn sheep populations over the long term.

Recreation user day projections for primitive and semi-primitive recreation activities other than whitewater boating would be about 4,215 user days annually within 20 years. Much of this use, including all 1,800 user days for backpacking/horsepacking and 50% or more of the hunting use (1,100 user days), would occur in association with canyon and plateau areas used by bighorn sheep. These recreation use levels could result in behavioral and/or physiological impacts to bighorn sheep. Studies by the U.S. Forest Service and California Department of Fish and Game (Light 1971, Graham 1971) have shown that human use of desert bighorn sheep habitat in excess of 500 visitor days (a visitor day being one 12 hour visit) can cause bighorn sheep to withdraw from their ranges. Another study of California bighorn sheep habitat in the Sierra Nevada Mountains (Dunaway 1971) identified gaps between five bighorn sheep ranges corresponding to areas of high human use. Three of these ranges also suffered losses in population numbers after major increases in recreation use, while the populations in the other two ranges not exposed to surges in recreational use remained stable.

The tolerance of human activity by bighorn sheep can vary dramatically from one population to another. This variation depends upon many factors including the duration, frequency, location, season and nature of the disturbance and past experiences of the population and the individual mature sheep, particularly the herd leader. In the case of the Owyhee Canyonlands WSAs, the timing, location and frequency of recreation use are all of major concern. Over 50% of the projected backpacking/horsepacking use is expected to occur during the cooler, moist spring months during the bighorn lambing period when they are especially sensitive to disturbance. All of the hunting use would occur in the fall months in conjunction with backpacking and

horsepacking use. Unlike the projected river boating use, much of the backpacking/horsepacking and hunting use would be located along the canyon rimrocks and in the major tributary canyons at or above the same topographical level where the bighorn sheep population normally resides. This topographic interrelationship between recreation users and bighorn sheep has been observed to cause greater distress than if recreation activities, such as boating, are confined to areas below the bighorns (Manson and Summer 1980). Consequently, projected backpacking/horsepacking and hunting use, combined with boating use, could cause disturbance to bighorn sheep populations. This disturbance would result in displacement of portions of the population into canyon areas to the north of the WSA complex unless the bighorn sheep are able to slowly adjust to human activity as recreation use increases.

Closure of 152.7 miles of roads and ways would limit access to the canyon rims. The closures would reduce human activity and vehicle noise in the interior of the suitable area. Since public access to the river system would be restricted to only a few spots, disturbance would be localized, resulting in reduced human disturbance to bighorn populations in the canyons and adjacent plateau rimrock areas. Since human traffic would be reduced, stress on the animals would also be reduced.

Since state wildlife management agencies would continue wildlife population management practices under each alternative, California bighorn sheep populations are projected to grow and serve as a source for transplants to other areas. Use of helicopters for trapping and transplanting bighorn sheep would continue to support establishment and expansion of the population. Maintenance of existing road networks between and adjacent to the WSAs would allow vehicle access for state game agencies to carry out transplanting programs.

Prescribed burning would be beneficial to bighorn sheep, especially where areas are burned within two miles of the canyon rims and with no increase in livestock use in the suitable areas. The burns would open up dense sagebrush stands and allow native grasses and forbs (Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox) to increase. This improved range condition on the plateau would increase forage availability and improve overall habitat conditions (forage/cover ratio) for bighorn sheep.

Construction of new reservoirs would improve bighorn habitat and their distribution. Although reservoirs near the canyon would be 1/2 to 1 mile from the canyon rims, they would still improve distribution for bighorn as well as livestock. These reservoirs will allow for more even utilization of the forage by both livestock and bighorns on the plateaus.

Based on current population estimates, projected recreation increases, available habitat, new reservoirs and improvements in range conditions, bighorn sheep populations are projected to reach 900-1,200 animals in 20 years, a 300% increase over present levels.

There would be no mineral prospecting, oil and gas exploration or utility corridor actions in the suitable area that would impact bighorn sheep.

Conclusion

In the suitable area, land acquisition along the Owyhee River, Battle Creek and Deep Creek would ensure that bighorn sheep in adjacent areas are not adversely impacted. Roads and ways closed on suitable lands would decrease disturbances to bighorn sheep populations, especially along the canyon rims. Increased recreation use could disturb bighorn sheep populations and cause displacement over the long term. Within the WSA complex, bighorn sheep populations are projected to expand into available unoccupied habitat. The population projection over the next 20 years is 900 - 1,200 animals.

Special Features (Cultural Values)

Suitable Area

Closure of 152.7 miles of roads and ways to motorized recreation and elimination of off-road vehicle use would reduce the current adverse impacts to cultural resources by reducing motorized access to sites now subject to acts of vandalism and theft, particularly along the canyon rim.

The projected 20 year boating use levels of 11,000 user days annually would mean that each of the major historic site complexes as well as considerable numbers of prehistoric lithic scatters, multi-functional campsites, rockshelters and rock art sites within the river canyons would be visited by parties of up to 15 people on an average of once every two days on the East Fork of the Owyhee River; twice a day on the South Fork; and four times a day below Three Forks during the peak use period of April 1 through June 30. While public education and information efforts would discourage most people from acts of vandalism and theft, the number of such acts would likely increase as visitor use rises over the next 20 years.

Land acquisition actions would have a beneficial impact on cultural resources. Six significant historic site complexes located in the river canyons would be acquired. These sites are important not only for their scientific research potential but for the outstanding recreational/aesthetic values they possess. Acquisition of private lands removes the possibility that sites on those lands would be disturbed or destroyed as a result of commercial recreational development.

Stabilization of 8 historic structures within the river canyons (6 on private lands, 3 on BLM lands), would have a substantial beneficial impact on cultural resources by reducing the current deterioration of significant properties, enhancing the aesthetic qualities of the area for visitors, and preserving scientific information on historic settlement patterns and lifeways for future study.

Livestock use in suitable areas would decrease about 6% overall and damages to cultural resources as a result of reduced trampling and related erosion would decrease slightly. Additional slight decreases in trampling would occur following implementation of grazing systems which would redistribute impacts over a broader area.

Vegetative manipulation, installation of range improvements (reservoirs and fences) and construction of recreational facilities (toilets, kiosks and signs) are all actions which have potential to disturb or destroy cultural resources which lie within their immediate impact areas. Should a significant site be discovered during any of these activities, potential impacts would be mitigated in advance of project construction after consultation with the State Historic Preservation Officer. Appropriate mitigating measures might include avoidance of a site by relocating or not authorizing a project, modification of a project to eliminate impacts, test or salvage excavation of endangered portions of a site, or merely recording a site. Once mitigation has been determined, project implementation is normally considered to have no impact on cultural resources.

Conclusion

Within the suitable area, vandalism and theft of cultural resources would be reduced by road and way closures. Increases in boating use would lead to increased levels of vandalism and theft in the river canyon areas over time. Acquisition of private lands containing six historic sites, and stabilization and protection of structures at those sites plus three sites on BLM lands would reduce the deterioration of significant resources and enhance the recreational/aesthetic experience for river users. Livestock use would be reduced and distributed over a broader area and trampling of sites would be reduced slightly.

IMPACTS TO THE CONDITION AND AMOUNT OF NATIVE VEGETATION

Suitable Area

Several sensitive plant sites would come under federal jurisdiction and protection as a result of land acquisition or exchange actions. Hedgehog cactus (Echinocactus simponsi), Inch-High Lupine (Lupine uncialus) and Bailey's Ivesia (Ivesia baileyi) are known to occur on state and private lands that are proposed for acquisition or exchange. There would be no impacts to these species from wilderness designation since there are no management actions which would affect these plants.

Development and use of two boating launch sites would impact vegetation in the canyons. Vegetation would be removed during construction of toilets and kiosks at these sites. Increases in recreation use would increase trampling and result in the establishment of trails and tent pads in the vicinity of the sites. Vegetative cover in the vicinity of the two launch sites would be lost over the long term on a total of five acres.

Increased recreation use would affect vegetation along two sections of river canyons; the upper South Fork Owyhee River in WSA NV-010-106 and the middle section of the Owyhee River in WSA OR-3-195. In these river sections, increased boating use combined with limited campsite availability would result in trampling and loss of vegetative cover on a total of five acres at the campsites.

Maintenance of the irrigation dam servicing the "45" Ranch on the South Fork Owyhee River would result in minimal disturbance. The established road would be used to move any needed equipment to the site. A small area of less than two acres has been set aside to provide fill for dam maintenance and vegetation at this site would be lost.

Livestock grazing use would be reduced approximately 6% within the suitable area. To restore or maintain the ecological condition of vegetation, management actions call for prescribed burning on areas in poor and fair ecological condition and improving livestock grazing systems. Areas in good ecological condition (119,095 acres) would not be treated.

Prescribed burning on 26,400 acres would reduce the shrub component and increase the grass/forb component in native plant communities and restore a more natural vegetative mosaic of open grassy areas (principally Idaho fescue and bluebunch wheatgrass) intermixed with areas containing various ages of low and big sagebrush species. Areas to be treated are big sagebrush ecological sites on the plateau. The existing amount of big sagebrush on the plateau would decrease significantly compared to low sagebrush. A rapid upward trend in condition would occur since livestock grazing pressure (AUMs) would be decreased as the native species are reestablished and regain dominance. Over time, and with continued livestock grazing, it is projected that the plant community would return to what presently exists on the proposed burn sites, mainly sagebrush. The time interval needed between rehabilitation efforts to retain a desired mosaic would be 20 to 30 years.

Improved grazing systems would allow an increase in the abundance and vigor of grasses and forbs by controlling the season of use for livestock. Since livestock use would be reduced approximately 6% over 20 years, and more forage would be available, grazing pressure would be reduced and overall livestock utilization of native plant communities would decrease in the long term. The increased abundance and vigor of grass and forb species would also reduce the susceptibility of areas to sagebrush encroachment. The ecological condition of native plant communities would generally improve with improved grazing systems. The current poor or fair ecological conditions on 331,177 acres of native plant communities across the plateau and in small areas of the canyons would improve. Canyon and plateau areas in good ecological condition (approximately 119,095 acres) would remain in stable condition (Table IV-15).

Of the 152.7 miles of vehicle routes closed to motorized recreation, native vegetation on 73.3 miles would partially recover and native perennial grass species would reestablish and dominate the wheel tracks. Native shrub species would not be expected to become established in the wheel tracks because of periodic crushing by maintenance vehicles associated with rangeland project maintenance. The remaining roads/ways (79.4 miles) would not have any vehicle traffic and would fully return to native species including sagebrush. Construction of four new reservoirs would eliminate the vegetation on eight acres (Table II-8).

There would be no mineral prospecting, oil and gas exploration or utility corridor actions in the suitable area that would impact native vegetation.

TABLE IV-15

IMPACTS TO ECOLOGICAL CONDITION OF NATIVE VEGETATION
FROM THE ALL WILDERNESS ALTERNATIVE (BLM ACRES)

WSA	Suitable Area Ecological Condition	
	Good Condition Retained[1]	Poor/Fair Condition Improved[2]
OR-3-195	61,750	128,950
ID-16-48B	12,850	20,850
ID-16-48C	6,365	20,165
ID-16-49A	10,035	61,745
ID-16-49D	2,390	7,600
ID-111-49E	2,375	29,585
ID-16-52	4,270	8,880
ID-16-53	14,560	28,185
NV-010-103A	1,700	6,142
NV-010-106	2,800	19,075
TOTALS	119,095	331,177

[1] Includes 40 non-WSA acres.
[2] Includes 4,165 non-WSA acres.

Conclusion

In the suitable area, prescribed burning, maintenance of present livestock levels, and improved grazing systems would cause good condition native vegetation (119,095 acres) to remain stable and 331,177 acres of poor/fair condition native vegetation to improve. Native vegetation would partially recover along 73.3 miles and would fully recover along 79.4 miles of roads/ways closed to motorized recreation use. Ten acres of vegetation would be lost at boating launch sites and along the upper South Fork Owyhee River and the middle section of the Owyhee River due to increased recreation use. Two acres of vegetation would be lost through the "45" Dam maintenance. Loss of eight acres of vegetation would occur from construction of four reservoirs.

IMPACTS TO THE LEVEL OF SELECTED WILDLIFE POPULATIONS

Suitable Area

Acquisition of 16,060 acres of non-federal lands would enhance management and protection of mule deer, pronghorn, sage grouse and redband trout by preventing potential conflicting uses which could adversely impact these wildlife populations or their habitats.

Closure of 152.7 miles of roads and ways would reduce motorized recreation use and hunting pressure on mule deer, pronghorn and sage grouse. The road closures would also reduce human disturbance associated with motorized vehicles and stress on the animals would be reduced. Since public access would be restricted to only a few routes, disturbance and hunting pressure would primarily occur in these few areas. Mule deer in particular would be disturbed less from closure of access routes which lead to the canyon rim or river. The closed vehicle routes would partially or fully revegetate but overall wildlife habitat would not be measurably affected. Although disturbance and hunting pressure would be reduced, wildlife populations are not projected to change over the long term because of road closures.

Burning 26,400 acres would benefit mule deer, pronghorn and sage grouse. The burns would open up dense sagebrush stands and allow native grasses and forbs to increase. Bluebunch wheatgrass, Idaho fescue, arrowleaf balsamroot, buckwheat, phlox and other forbs would increase. The edge affect created by the fire would also provide escape, loafing and nesting cover (Wright and Bailey 1982). The improved range condition on the plateau would increase wildlife forage availability and improve overall habitat conditions (forage/cover ratio) for pronghorn, mule deer and sage grouse. Sage grouse habitat and populations would also improve from this increase in forage and opening of dense sagebrush stands, particularly during the spring and summer months. The increase of forbs and grasses would increase the food available to sage grouse broods (Blaisdell 1953). As a result of the burning and opening up of dense sagebrush stands combined with a 6% decrease in livestock gazing, an estimated increase of 25-30% in mule deer and pronghorn numbers is projected. Sage grouse populations would increase by an estimated 20%.

Construction of four new reservoirs and nine miles of fence would affect mule deer and pronghorn. The new reservoirs and fences would allow for improved grazing systems which would redistribute livestock. This would allow for more even utilization of forage by livestock on the plateaus which would improve the ecological condition of plant communities and increase forage availability for wildlife. Reservoirs would contain water in their impoundments which would be available to wildlife well after natural water sources dry up during the late summer months. This would reduce stress on the animals by reducing their traveling distance to alternate water sources. The new reservoirs would also allow wildlife to inhabit previously underutilized areas during this time. New fences would have a minimal impact on wildlife movement since new fences would be constructed to allow for wildlife passage.

There would be no mineral prospecting, oil and gas exploration or utility corridor actions in the suitable area that would impact wildlife populations.

Conclusion

Land acquisition would benefit mule deer, pronghorn, sage grouse and redband trout by eliminating potential resource conflicts. Road and way closures would reduce disturbance to wildlife populations, especially along

the canyon rims. Rangeland management actions on suitable lands would increase mule deer and pronghorn populations by 25-30% and sage grouse populations by 20%.

IMPACTS TO THE LEVEL OF SEMI-PRIMITIVE RECREATION

Suitable Area

Of the 16,060 acres of non-federal lands recommended for acquisition, 1,160 acres are private lands presently accessed by motor vehicles for semi-primitive recreation activities (principally vehicle camping, hunting, sightseeing and some fishing). Only the road to 160 acres of these private lands at Crutcher's Crossing (a boating launch site) between WSAs ID-16-48B and ID-16-49A would be maintained. The other lands have roads which would be closed to motorized recreation use, specifically the roads into Five Bar (WSA OR-3-195), Battle Creek confluence (WSAs ID-16-49A/ID-111-49E/ID-16-49D), Coyote Hole (WSA ID-16-53), and Twelve Mile (WSA NV-010-106).

Wilderness designation would result in the closure of 152.7 miles of the roads and ways currently used for semi-primitive motorized recreation use which lead to the interior plateau, canyons or isolated locations along the canyon rimrocks (Table II-3 and IV-4). Recreation users dependent upon motor vehicle transportation would lose opportunities for semi-primitive activities in these areas.

Most motorized hunting activities would be displaced to adjacent areas because of road closures. Some big game hunters would continue to pursue mule deer, pronghorn antelope, and bighorn sheep in the area, even if vehicle use is restricted. The big game road hunters would change to hunting on foot or horseback. Bird hunters would not tend to switch to foot or horseback. Chukar hunting within the canyons would be reduced because of access restrictions to rimrock areas. The road and way closures would also eliminate sage grouse hunting on interior plateau areas. Overall, motorized hunting opportunities within the suitable area would be reduced substantially. However, there are many areas around the WSAs as well as the entire high plateau country of Oregon, Idaho and Nevada where motorized hunting activities associated with plateau areas are of equal or greater quality. Therefore, road closures would slightly reduce motorized hunting opportunities in the three-state area as a whole.

Rock hounds are highly dependent upon road access to sources of gem stones in the canyons. Eliminating the vehicle routes to rimrock areas would greatly restrict collection opportunities, however, opportunities exist elsewhere in the three-state area.

Some people use the Owyhee Canyonlands area primarily for motorized sightseeing and vehicle camping. The scenic overlooks and vehicle camping sites located at or near the end of cherrystem roads and ways would not be accessible to sightseers and campers by motorized vehicles because of road closures. However, vehicle routes into the canyons between the WSAs would remain open and continue to permit scenic views of the canyons and allow

vehicle camping within the canyons. Though most sites would be closed to motor vehicle access, a few sites would remain accessible. Overall, semi-primitive motorized sightseeing and camping opportunities would be greatly reduced.

Closure of the suitable area to motor vehicle use would not have a notable impact upon recreationists who drive motor vehicles off of roads and ways. Off-road vehicle (ORV) opportunities in the WSAs are minimal because of natural terrain or surface structure limitations. Little ORV use currently exists except when necessary for hunting because of the ample availability of areas closer to population centers.

The All Wilderness Alternative calls for maintaining the major road access to the boating launch sites between the WSAs as well as providing some minimal facilities (toilets) at the sites. Semi-primitive motorized recreation use associated with these access roads would continue. The roads would provide opportunities for recreation users to reach the river canyons for hunting as well as allow some opportunity for sightseeing, rock hounding and vehicle camping.

Land acquisition would result in the closure of additional roads between or within the WSAs (Five Bar, Battle Creek confluence, Coyote Hole and Twelve Mile) which currently lead to non-federal inholdings because access to these lands would no longer be required.

Conclusion

Wilderness designation would result in the closure of 152.7 miles of vehicle routes on suitable lands. Non-federal land acquisition associated with suitable WSA lands would also result in some additional road closures between and within WSAs. These closures would reduce semi-primitive motorized recreation opportunities on the plateau and in some canyon areas. Maintenance of existing river access roads to boating launch sites between the WSAs would ensure continued use of these canyon areas.

Within 20 years, hunting is projected to reach 2,200 user days annually while use for other activities (sightseeing, rock hounding and vehicle camping) is projected to reach only 215 user days (Table IV-2).

IMPACTS TO THE LEVEL OF LIVESTOCK USE

Suitable Area

Maintenance of existing rangeland facilities would continue. Motorized vehicle use on 152.7 miles of roads and ways closed to motorized recreation would be controlled to allow for facility maintenance and construction. Bulldozers would be used for reservoir maintenance and construction. Motorized vehicles would be used for fence maintenance once each year at the beginning of the grazing season. Salting, livestock monitoring and allotment supervision would be conducted by horseback. Four new reservoirs and nine miles of fence would be constructed (Table II-8). Livestock grazing would decrease by up to 1%.

Estimated livestock use within affected allotments would increase by 1,482 AUMs (230,319 AUMs to 231,801 AUMs) in 20 years. This would be a 1% increase over the current active preference for all allotments (Table IV-5). Estimated livestock use within the WSA boundaries would decrease by 1,872 AUMs in 20 years (6% decrease) (Table IV-6).

Conclusion

Motorized use would be restricted on 152.7 miles of roads and ways in suitable areas. Livestock use within the affected allotments would increase 1,482 AUMs (1%). Livestock use within the WSA boundaries would decrease 1,872 AUMs (6%). Four reservoirs and nine miles of fence would be constructed in the suitable area.

IMPACTS ON THE LEVEL OF SOIL EROSION

Suitable Area

Road and way closures (Table II-3) would affect the soil resource. It is estimated that the current soil loss from these sources is over 400 tons/year. Since these areas would be closed to motorized recreation and no longer subject to mechanical disturbance (except for occasional use for maintaining rangeland facilities), they would revegetate and soil loss would decrease to about 50 tons/year.

Rangeland burning with or without seeding is projected for 26,400 acres. The 2,640 acres/year treated (over a ten year period) would be subject to a one to two year increase in soil loss prior to revegetation. The increased soil loss could be from two to as much as ten times or more the pretreatment level depending on soil type, slope, aspect and climatic conditions. As vegetation (primarily grasses and forbs) becomes reestablished and plant density increases, long-term (usually after the third year) soil losses are projected to decrease to below pretreatment levels. The long term soil losses are projected to be 5 to 15% (0.1 to 0.3 tons/acre/year) below current levels.

Livestock decreases in WSAs NV-16-53 and NV-010-106 (52%) combined with improved grazing systems would improve range condition which would reduce soil erosion. Erosion rates in these areas are projected to decrease 20% to 25% (0.2 to 0.5 tons/acre/year). Erosion rates in the other WSAs would remain relatively unaffected.

Rangeland management actions combined are projected to decrease soil erosion by about 10% (0.2 tons/acre/year).

Conclusion

In the suitable area, broad based erosion rates would decrease by about 10% (0.2 tons/acre/year) under the current rate of 2.0 tons/acre/year.

IMPACTS TO WATER QUALITY

Suitable Area

Road and way closures (See Table II-3) would maintain or improve water quality since these areas would revegetate and decrease possible sediment delivery to streams from these sources.

Decreased livestock use in Nevada (52%) combined with rangeland improvement projects and improved grazing systems would improve the range condition and decrease broad based soil erosion. This would decrease the amount of sediment delivery to waterways by up to 10%.

Conclusion

Suspended sediment loads would be reduced by up to 10% in suitable areas.

IMPACTS ON LOCAL INCOME AND JOBS

The AUMs available in the affected allotments in 20 years could result in an annual income of $2.3 million. This would be a 23% increase over the present situation (1982 licensed actual use). Recreation use in the WSAs projected in 20 years would result in annual income of $539,000 which is a 293% increase over the present situation.

Employment related to the available AUMs would be 65 jobs in 20 years. There would be 128 jobs in 20 years associated with the projected recreation use. These would be increases of 23% and 142% respectively.

The total income and employment impacts (in 20 years) from this alternative would be $2.8 million and 193 jobs. These would represent 0.8% and 0.6% of the 1981 local personal income and employment respectively. The total increase in income (above existing situation) would be $0.8 million or 0.2% of the 1981 local personal income. The total increase in employment would be 87 jobs or 0.3% of the 1981 employment in the local economy. These increases would be insignificant to the local economy.

Conclusion

The All Wilderness Alternative would result in a 0.2% increase in personal income and a 0.3% increase in employment over 20 years in the three-county area.

IMPACTS TO OVERHEAD TRANSMISSION LINE DEVELOPMENT IN NEVADA

The two overhead high voltage transmission lines within the Twelve Mile Corridor in the vicinity of WSA NV-010-106 would be routed around the southeast portion of the WSA. The transmission lines, which would be located about one mile from the WSA boundary in order to protect wilderness values, would not generally be visible from the WSA. The transmission lines would be located within the five mile wide planning corridor.

Routing the north-south transmission line around the southeast portion of WSA NV-101-106 would not result in any additional length since the north-south five mile wide planning corridor is offset in this area and this transmission line would have to be realigned somewhere in this vicinity. This realignment would occur whether the transmission line were routed through or around the WSA.

Routing the east-west transmission line around the southeast portion of WSA NV-010-106 would add approximately five miles to its length in this vicinity. Based on an average total construction cost (survey, material, labor, land, roads, administration) of $400,000 per-mile, the additional length required to route this transmission line around the WSA would increase the cost of this transmission line approximately $2,000,000.

Conclusion

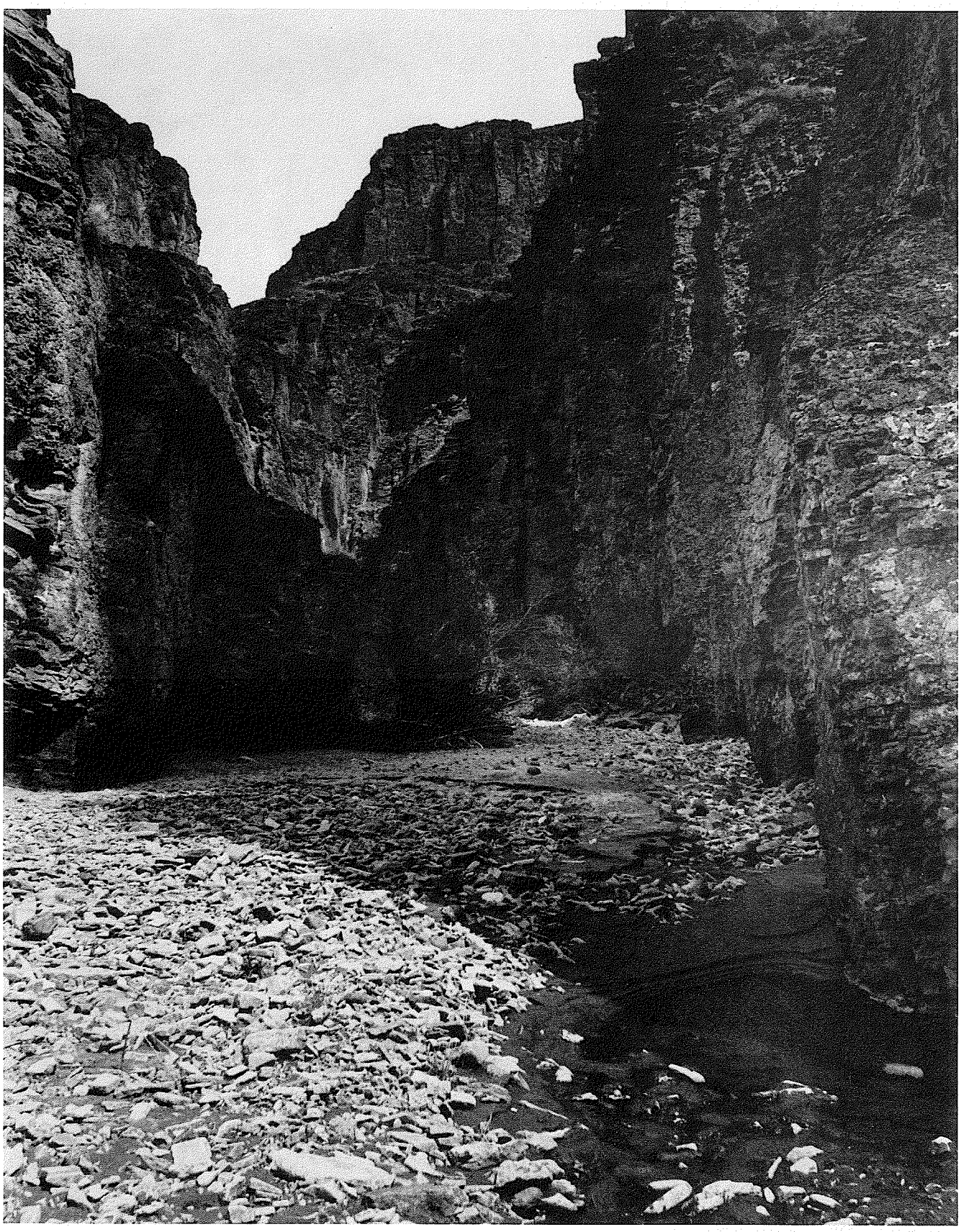
Routing the east-west overhead high voltage transmission line around WSA NV-010-106 would increase the cost of this transmission line approximately $2,000,000.

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

In both suitable and nonsuitable areas under the Proposed Action, continuation of current uses and projected uses during the foreseeable future are not expected to seriously affect resource productivity over the long term. Prescribed burning and seeding would alter vegetative communities in small areas during the short term and long-term productivity in those areas would increase. Reservoirs and fences would allow for better livestock distribution which would improve range condition and increase productivity over the long term. Productivity would increase over the long term along vehicle routes closed to public recreation use. These changes in the vegetative community would lead to increases productivity within wildlife populations over the long term. Vegetative productivity would decrease over the long term along utility corridors as they are developed. Vegetative productivity from oil and gas exploration would decrease during the short term but would be restored over the long term.

IRREVERSIBLE AND IRRETRIEVABLE RESOURCE COMMITMENTS

Under the Proposed Action, cultural resources, primarily in the river canyons, would experience increased vandalism because of increased recreation use, primarily river boating, and would occur regardless of wilderness designation. Native vegetation in the suitable area would be lost on ten acres due to development of boating launch sites and increased river recreation use and a total of ten acres would be lost to reservoir construction at five sites. In the nonsuitable area, 13 acres of native vegetation would be lost to utility corridor development (pipeline and powerlines) and a total of 12 acres would be lost to reservoir construction at six sites. Naturalness and primitive recreation opportunities would be lost on 515 suitable acres and 10,245 nonsuitable acres due to utility corridor development (pipeline and powerlines). All other resource commitments would be recoverable over the long term.



Side Canyon of Deep Creek

WSA ID-16-49A

CHAPTER V

Hole-Up Canyon of Juniper Creek

WSA ID-16-52

CHAPTER V
COORDINATION, CONSISTENCY, AND PUBLIC PARTICIPATION

COORDINATION AND CONSULTATION

Coordination and consultation has been a continuing process beginning in 1978 with the initial wilderness inventory of BLM lands. The issue identification and alternative formulation process for the draft EIS involved individual contacts with federal, state and local government agencies, organizations or interest groups, and individuals affected by the Proposed Action. Approximately 700 informational packets were mailed out to solicit comments on issues. The scoping process for the draft EIS is outlined in Chapter I. Nearly 1,800 copies of the draft EIS were given out for public review.

CONSISTENCY

The proposed Owyhee Canyonlands Wilderness and its management objectives are consistent with the management of the Owyhee River in Oregon as a congressional designated wild river under the Wild and Scenic Rivers Act (PL-542) of 1968. The wilderness proposal contains management actions which are also consistent with the objectives of The Idaho State Water Plan (adopted 1982) which supports the "concept of designating selected Idaho river segments as wild and scenic through either federal or state programs, so that legal protection can be provided to insure that the rivers and their immediate environments are preserved for the benefit and enjoyment of present and future generations." The Idaho Department of Parks and Recreation has recommended that the Owyhee River and its tributaries be included under a State Natural and Recreational River System. Lastly, wilderness management is consistent with the scenic designation given to the Owyhee River under the Oregon State Scenic Waterways System.

The management objectives of the Owyhee Canyonlands Wilderness are also consistent with wildlife management objectives identified by state wildlife management agencies in Oregon, Idaho and Nevada, though the agencies support varying amounts of designated wilderness.

The designation of BLM administered lands as wilderness is not specifically addressed in local county or state land use plans. Though local county governments support the concept of retaining the primitive or backcountry character of selected lands, they have strongly opposed the legal designation of the Owyhee Canyonlands as wilderness.

PUBLIC PARTICIPATION

Preparation of the Draft EIS

Each of the three BLM districts and state offices involved prepared wilderness study public participation plans to continue the public review process begun during the wilderness inventory. The district plans coordinate all wilderness studies to maintain consistency between issue identification and the BLM Wilderness Study Policy.

The government agencies, elected officials, and interest groups that participated in the EIS process by providing input during the preparation of the draft EIS are listed below.

Type of Respondent

Elected Officials
- Owyhee County Sheriff

State Agencies
- Idaho Division of Highways, Dist. 3
- Idaho Dept. of Fish & Game, Region 3
- Idaho Dept. of Water Resources
- Oregon Dept. of Transportation, Parks & Rec. Div.
- Nevada Division of State Lands
- Nevada Dept. of Wildlife

Federal Agencies
- Soil Conservation Service
- Bureau of Indian Affairs, Eastern Nevada Agency
- Dept. of Energy, Bonneville Power Administration

Environmental Organizations
- Mazamas
- Wildlife Management Institute
- Idaho Environmental Council
- Idaho Consumer Affairs & Idaho Wildlife Federation
- Sierra Club - Oregon Chapter
- Sierra Club - Northern Rockies Chapter
- Sierra Club - Toiyabe Chapter
- American Wilderness Alliance
- The Wilderness Society - Northwest Representatives
- The Wilderness Society - Northern Rockies Rep.
- Committee for Idaho's High Desert
- Idaho Conservation League
- Grande Ronde Resources Council, Inc.

Mining Companies
- Danner Mines, Inc.
- Minerals Exploration Coalition

River Outfitters
- Cascade Whitewater Adventure
- Wilderness World, Inc.

Grazing Permittees within WSA boundaries
- Glenns Ferry Grazing Assn., Inc.
- Michael E. Stanford

Livestock Organizations
- Owyhee Cattlemen's Assoc. Action Committee

Type of Respondent

Utility Companies
Sierra Pacific Power Co.
Pacific Power and Light Co.
Idaho Power Co.

Individuals (173)

DRAFT EIS DISTRIBUTION

The draft Owyhee Canyonlands Wilderness EIS was distributed to the following elected officials, government agencies, organizations (interest groups) and individuals for review and comment.

Federal Agencies

Department of Agriculture:
U.S. Forest Service
U.S. Soil Conservation Service

Department of Defense:
U.S. Air Force

Department of Energy:
Bonneville Power Administration

Department of the Interior:
National Park Service
U.S. Bureau of Indian Affairs
U.S. Bureau of Reclamation
U.S. Bureau of Mines
U.S. Fish and Wildlife Service
U.S. Geological Survey

Department of Transportation:
Federal Aviation Administration

Environmental Protection Agency

Federal Energy Regulatory Commission

State Agencies, Commissions or Boards

Idaho Air National Guard
Idaho Department of Agriculture
Idaho Department of Fish and Game
Idaho Department of Health, Welfare and Environmental Services
Idaho Department of Lands
Idaho Department of Parks and Recreation
Idaho Department of Transportation
Idaho Department of Water Resources

Idaho Historic Preservation Office
Idaho Public Utilities Commission
Idaho State Clearing House
Idaho Outfitters and Guides Board
Nevada Bureau of Mines
Nevada Department of Conservation and Natural Resources
Nevada Department of Wildlife
Nevada Historical Preservation Office
Nevada Legislative Council Bureau
Nevada State Indian Commission
Nevada State Planning Coordinator's Office
Oregon Department of Agriculture
Oregon Department of Energy
Oregon Department of Environmental Quality
Oregon Department of Fish and Wildlife
Oregon Department of Forestry
Oregon Department of Geology and Mineral Industries
Oregon Department of Transportation
Oregon Division of Lands
Oregon State Historic Preservation Office
Oregon State Marine Board
Oregon State Parks and Recreation Board
Oregon State Scenic Waterways Commission
Oregon Sheep Commission
Oregon State Soil and Water Conservation Commission

Local Agencies

Elko County Planning Commission
Elko County Manager
Malheur County Planning Department
Malheur County Historical Society
Owyhee County Historic Society

Advisory Councils

District Multiple Use Advisory Councils
District Grazing Advisory Boards

Organizations

Ada County Fish and Game League
Appaloosa Horse Club
American Alpine Club
American Fisheries Society
American Wilderness Alliance
Association of Idaho Cities
Association of Western Native Plant Societies
Audubon Society
Boise Chamber of Commerce
B.S.U. Conservation Group
Caldwell Chamber of Commerce

Committee for Idaho's High Desert
Defenders of Wildlife
Desert Bighorn Sheep Council
Desert Fishes Council
Desert Raiders
Desert Rats
Desert Research Institute
Desert Tortise Council
Ducks Unlimited
Earth First
Eastern Oregon Mining Association
Elko Chamber of Commerce
Elko Civil Air Patrol
Elko County Resource Action Council
Elko County Sportsmen Association
Federation of Western Outdoor Clubs
Four-Wheel Drive Club, Elko
Francis Peak Gem and Mineral Society
Friends of the Earth
Friends of Nevada Wildlife
Gem County Rock and Mineral Society
Good Sam Club
Grande Ronde Resource Council, Inc.
Idaho Alpine Club
Idaho Archaeological Society
Idaho Association of Counties
Idaho Carey Act Association
Idaho Cattlemen's Association
Idaho Conservation League
Idaho Environmental Council
Idaho Farm Bureau Federation
Idaho Gem Club
Idaho Historical Society
Idaho Mining Association
Idaho Natural Areas Coordinating Committee
Idaho Outdoor Association
Idaho Outfitters and Guides Association
Idaho Petroleum Council
Idaho Sportsmen's Coalition
Idaho State Grange
Idaho Trail Machine Association
Idaho Wildlife Federation
Idaho Whitewater Association
Independent Petroleum Association of the Mountain States
Institute for High Desert Studies
Intertribal Council of Nevada
Isaac Walton League
Jackpot Sportsmen's Club
Knights Motorcycle Club
Malheur Livestock Association
Mazama Conservation League
Mountain Home Air Force Base Sportsman Club
National Council of Public Land Users

National Organization of River Sports
National Public Land Advisory Council
National Public Lands Task Force
National Rifle Association of America
National Wildlife Federation
Native Plant Society of Oregon
Natural Resource Defense Council
Nature Conservancy
Nevada Archaeological Association
Nevada Cattlemen's Association
Nevada Historical Society
Nevada Land Action Association
Nevada Mining Association
Nevada Open Land Organized Council
Nevada Outdoor Recreation Association
Nevada Public Land Users
Nevada Wildlife Federation
Northeastern Nevada Miners and Prospectors
Northern Nevada Native Plant Society
Northwest Federation of Mineralogical Societies
Northwest Outdoor Recreation Association
Northwest Rafter Association
Northwest Mining Association
Oregon Association of Counties
Oregon Cattlemen's Association
Oregon Council of Rocks and Minerals
Oregon Council of Rock and Mineral Clubs
Oregon Environmental Council
Oregon Historical Society
Oregon Mining Association
Oregon Natural Resources Council
Oregon Packers and Guides
Oregon Park and Recreation Society
Owyhee Cattlemen's Association
Owyhee Gem and Mineral Society
Pacific Legal Foundation
Pacific Northwest 4-Wheel Drive Association
Public Lands Council
River Rafters of Oregon
Sagebrush Rebellion, Inc.
Sierra Club
Snake River Gem Club
Society for Range Management
Treasure Valley Club
Treasure Valley Rock and Gem Club
United 4 Wheel Drive Association
Whatever 4 Wheelers
Western River Guides Association
Wilderness Institute
Wilderness Society
Wildlife Management Institute
Wildlife Society
Wildlife Research Institute

Individuals, Businesses, and Schools

Affected grazing permittees
Affected river outfitters and guides
Colleges and universities
Other individuals, businesses and industries (minerals and energy)

Elected Officials

Federal:

Senator Paul Laxalt (Nevada)
Senator Mark Hatfield (Oregon)
Senator Chic Hecht (Nevada)
Senator James McClure (Idaho)
Senator Robert Packwood (Oregon)
Senator Steve Symms (Idaho)
Congressman Larry Craig (Idaho)
Congressman George Hansen (Idaho)
Congressman Harry Reid (Nevada)
Congressman Bob Smith (Oregon)
Congresswoman Barbara Vucanovich (Nevada)

State:

Governor Victor Atiyeh (Oregon)
Governor Richard Bryan (Nevada)
Governor John Evans (Idaho)
Senator Norman Glaser (Nevada)
Senator James Risch (Idaho)
Senator Mike Thorne (Oregon)
Senator Eugene Timms (Oregon)
Senator Walt Yarborough (Idaho)
Senator Clifton Young (Nevada)
Representative Bob Brogotti (Oregon)
Representative Bob Harper (Oregon)
Representative Denny Jones (Oregon)
Representative Gerry Montgomery (Idaho)
Representative Max Simpson (Oregon)
Representative Lyman Winchester (Idaho)
Assemblyman Byron Bilyeu (Nevada)
Assemblyman John Marvel (Nevada)

Local:

Ada County Commissioners
Ada County Sheriff
Canyon County Commissioners
Elko County Commissioners
Elko County Sheriff
Grant County Court
Malheur County Commissioners
Malheur County Court
Malheur County Sheriff
Owyhee County Commissioners
Owyhee County Sheriff

SUMMARY OF PUBLIC COMMENT ON THE DRAFT EIS

Statistical Information

A public comment period on the draft Owyhee Canyonlands Wilderness EIS occurred from February 24th to May 31, 1984. There were 391 written comments received by June 7, 1984. Additional written comments were received by the Idaho Air National Guard and Army Corp of Engineers in 1985 and 1986 respectively.

Public hearings were held on the proposed wilderness recommendation during April of 1984. These hearings were held in Jordan Valley, Oregon on April 10th; Boise, Idaho on April 11th; Portland, Oregon on April 12th; Reno, Nevada on April 17th; and Elko, Nevada on April 18th. There were 264 people in attendance at these hearings, of which 117 gave oral testimony. Some individuals gave testimony at several hearings and some also provided additional written comment during the comment period.

Nine individuals also provided oral comments to the Boise District Multiple Use Advisory Council at their meeting on June 24, 1984.

Both written and oral comments were analyzed and catagorized for significant concerns. The analysis resulted in the identification of seven major areas of concern for wanting a suitable wilderness recommendation and eight major areas of concern for wanting a nonsuitable wilderness recommendation for all or part of the Owyhee Canyonlands WSAs. These areas of concern are listed in Table V-1 on page V-14. The table also gives the percentage of comments received which addressed each area of concern.

Synopsis of Pro-Wilderness Comments

The great majority of those supporting wilderness designation (84%) in the Owyhee Canyonlands WSAs wanted a larger wilderness area than the 374,160 acre area recommended in the draft EIS. Eight percent supported the Proposed Action of the draft EIS while four percent wanted only a wilderness area within the canyons of the WSAs (87,000 acres). The remainder of wilderness supporters (4%) didn't identify a specific acreage proposal.

Those supporting a larger wilderness area overwhelmingly support the 1.2 million acre area proposed by the Committee for Idaho's High Desert. This proposal is nearly three times the size of the land under study in the EIS. It includes all lands within the WSAs plus a number of wilderness inventory units surrounding the WSAs which were previously determined by the BLM inventory process to be lacking in wilderness characteristics.

Those supporting wilderness designation of the Owyhee Canyonlands addressed seven areas of concern. These concerns include the following:

1) The WSAs' solitude and primitive recreation values

Wilderness advocates argue that wilderness designation is needed to preserve a more natural area for outstanding river running, backpacking and other recreation opportunities. They recognize that the Owyhee River area is one of the last remaining primeval landscapes in the western United States. Its plateau possesses a sense of vastness and solitude hard to equal elsewhere. The canyons of the Owyhee River also offer an opportunity for solitude that is truly unique among the various popular western rivers. The combination of a spring boating season, a volatile watershed and difficult road access help protect the river's solitude. The solitude found on the plateau and in the canyons of the Owyhee River plus the quality of whitewater boating activities (tremendous rapids and arduous portages) available on the river makes the WSAs' recreation resources of national significance.

2) The protection of the Owyhee River ecosystem

Wilderness supporters feel that wilderness designation is needed to protect one of the last free flowing river ecosystems in the lower 48 states. The protection of the Owyhee River ecosystem requires the preservation of both its canyons and the surrounding plateau.

3) Concern for the enjoyment of wildlands by future generations

Wilderness advocates recognize that wilderness lands are diminishing. The United States must now use 90 to 95% of its land intensively but it must also save 5 to 10% in a natural state for future use. Undeveloped lands are needed by future generations as a place to get away from a crowded world. The Owyhee county has potential as an important recreation use area in years to come. As traditional forest wilderness areas become more crowded, people are going to need desert wilderness.

4) Concern for the protection of special features (supplemental values) associated with the Owyhee River

Supporters of wilderness look to the preservation of special resource values associated with the Owyhee River ecosystem as one of the main reasons for wilderness designation. The Owyhee River canyons and its surrounding plateau are recognized as a significant wildlife habitat area. The river canyons and plateau are also rich in scenic quality, cultural resources and natural vegetation communities. They feel that wilderness designation is the best way to give long-term protection to these resources. Of particular concern is the perpetuation of natural habitat for bighorn sheep.

5) Concern over conflicting resource development or nonwilderness uses

Wilderness advocates are concerned that without wilderness designation long-term planning for the development of consumptive resource uses will lead to the degradation or loss of the area's wilderness quality and associated special features (wildlife, scenic, cultural and vegetation resources). They

feel that nondesignation will eventually result in increased off-road vehicle use, the widespread conversion of native plant communities to seedings of non-native species for livestock forage production, the installation of high voltage powerline systems, the construction of hydroelectric dam facilities in the canyons, and mineral and energy exploration and development activities.

6) The economic benefits of wilderness

Wilderness supporters believe that wilderness designation is a long-term investment in the nation's future. Wilderness designation would enhance recreation related economic values without adversely affecting present uses such as livestock grazing. Tourism will eventually provide much greater future revenues than grazing. The taxpayers are subsidizing the livestock industry with range management/improvement programs which cause degradation of a natural desert environment essential for the long-term enhancement of other resource (recreation and wildlife) uses. Any mineral deposits which exist will not disappear with wilderness designation. They are stored for possible use by future generations.

7) Concern over amount of wilderness acreage recommended and the use of manageability adjustments

As previously stated, the majority of wilderness advocates want a wilderness area considerably larger than that proposed in the draft EIS. They regard any wilderness boundary adjustments smaller than those of the existing WSAs as unjustifiable or unwarranted in light of the quality of wilderness characteristics and supplemental values (principally watershed, wildlife and vegetation values) they feel exist in the areas proposed for elimination. They are convinced that BLM is biased against plateau wilderness and used questionable reasons to eliminate plateau lands from the Proposed Action of the draft EIS. They consider all plateau areas to be manageable as wilderness and worthy of that management. Adjustments should not occur 1) because of minimal or infrequent external influences of adjacent rangeland developments or vehicle traffic on boundary roads, 2) to eliminate impacts from private inholdings, 3) to eliminate cherrystem roads and rangeland developments of minimal impact, 4) because lands may be driveable (used for ORV recreation activities), or 5) to anticipate future impacts upon recreation management needs. They felt that the BLM assumed that such impacts cannot be dealt with through administrative actions. The adjustments also suggest that management policies are based largely upon rules that are readily enforceable rather than upon those which are essential for resource protection.

Synopsis of Anti-Wilderness Comments

Those opposed to wilderness designation of the Owyhee Canyonlands area feel that the continuation of "multiple use" management is in the best interest of the general public. Nearly all concerned believe that the Owyhee River Canyon is a unique resource worth protecting. This protection should be accomplished through the designation of the river under the Wild and Scenic Rivers Act of 1968. The wild river designation has been widely accepted by the livestock industry and local governmental bodies as the only

viable alternative (No Action/No Wilderness Alternative) to protect the values associated with the Owyhee Canyonlands. Some also think that the existing ACEC/HMA/SRMA designation provides adequate protection to wilderness values associated with the plateau, though they may question if such characteristics exist.

Opposition to wilderness designation of the Owyhee Canyonlands dealt with eight major areas of concern. These concerns include the following:

1) The potential for water resource development

Wilderness opponents point out that wilderness designation will not necessarily prevent dam construction. Dam construction could occur at the discretion of the President. Only wild and scenic river designation would prevent dam construction. They feel that BLM is trying to influence wilderness designation by concluding that the Owyhee River is threatened by dam construction, yet no dams are specifically proposed or authorized.

2) The potential for mineral and energy development

The mineral and energy industries are of the opinion that wilderness designation is not appropriate, except possibly within the canyons, because of the potential for energy and mineral resources. They argue that geological and geophysical evidence suggests that hydrocarbon prone sedimentary rocks lie at depth beneath the volcanic mantle of the WSAs. They also contend that geochemical anomalies hosted in the volcanic rocks indicate a potential for gold, silver and mercury deposits of commercial worth. Utility companies and the Department of Energy believe that the need for future utility corridors in the area have not been given adequate consideration.

3) "Multiple use" versus the wilderness "lock-up"

Wilderness opponents think that wilderness designation is too restrictive to allow for the use of the Owyhee Canyonlands area by the public at large. They feel that wilderness designation would subordinate the Owyhee Canyonlands to special interests who represent only a small portion of the population that is wealthy enough, fit enough and young enough to enjoy its use. Over 125 years of "multiple use" has not destroyed the area's wilderness characteristics, so why is a change in management necessary. A combination of a wild and scenic river designation and the ACEC/HMA can provide adequate protection to the elements of the ecosystem "theorized as threatened."

4) The economic impact of wilderness

Wilderness opponents argue that nonwilderness is best for the economy because it permits the potential development of mineral and energy resources and the assured continuation of livestock grazing which are essential to the growth of the local, state and national economy. They believe that wilderness is a subsidy to special recreation interest groups since most money spent by government agencies on recreation management is not reclaimed by recreation use fees.

5) The impact of wilderness upon present recreation use and solitude opportunities

Wilderness opponents point out that wilderness designation will displace those people currently using the Owyhee Canyonlands area for semi-primitive motorized recreation activities such as hunting, ORV use and vehicle camping, rock hounding and sightseeing. They feel that the BLM has failed to realize that outstanding opportunities for solitude can still be achieved in the area even though a motorized vehicle is being used for transportation. They also think that BLM has placed too much emphasis on the management of whitewater boating in the river canyons and ignored the needs of other recreation user groups. Lastly, they believe that the frequent low elevation flights by military aircraft disrupt the type of solitude experience essential for a true wilderness experience.

6) The impact of wilderness on vegetation management

Opponents of wilderness designation point out that wilderness is not necessary for the protection of native vegetation because the ecological condition of these communities is also expected to improve under no wilderness. They also think that a three state representation of the rhyolite upland- canyonlands/sagebrush-bunchgrass ecosystem in the NWPS is not needed because "the ecosystem will not vanish from the face of the earth if it not designated wilderness."

7) The impact of wilderness on wildlife management

Wilderness opponents argue that since bighorn sheep populations and other wildlife species populations are on the increase, or are stable under present "multiple use" management, a wilderness designation to protect wildlife values is not necessary. They also believe that wildlife management objectives under wilderness which allow for prescribed burning or for research, trapping and transportation by helicopter discredits the actual wilderness concept.

8) The manageability of BLM desert wilderness

Wilderness opponents argue that wilderness designation does not automatically insure the preservation of anything. They claim that there is no effective way of policing the plateau considering the likelihood of limited budgets for management. The closure of cherrystem roads and ways amounts to the creation of wilderness rather than the protection of wilderness. Such closures suggest that significant wilderness values are lacking. Closures would not be necessary if true wilderness existed. If the area cannot be managed without closing existing roads, it should not be designated wilderness. In addition, adjusting the configuration of the wilderness area within the WSAs along legal subdivisions leads to undefineable boundaries which cost money to survey and post. Adjustments outside the WSAs constitute "buffer zones" which are prohibited by the BLM Wilderness Management Policy.

Public Comment Concerning the Adequacy of the Draft EIS

A number of comments were received concerning the adequacy or completeness of the Description of the Affected Environment Chapter and the Environmental Consequences Chapter of the draft EIS. There were also concerns about specific management objectives contained in the Proposed Action and No Wilderness/No Action Alternative and how wilderness boundary adjustments occurred in the Proposed Action and various alternatives. Substantive written comments which questioned the adequacy of the EIS are reproduced at the end of this chapter. Excerpts from substantive oral testimony, as well as BLM's response to those substantive written and oral comments, are also located at the end of this chapter.

PUBLIC COMMENT LOG

The alternative preference and the concerns sited by each public comment are listed in Table V-2. The pro-wilderness (P) and anti-wilderness (A) concerns shown are those listed previously on Table V-1.

The alternatives which were under assessment in the draft EIS were:

Proposed Action - All Manageable Wilderness Alternative (PA)
No Action/No Wilderness Alternative (NW)
Canyonlands Wilderness Alternative (CW)
Wildlife Wilderness Alternative (WW)
All Wilderness Alternative (AW)

Additional alternatives presented by the public during the comment period included:

Conservationists' Modified All Wilderness Alternative (CIHD)
Earth First Alternative (EF)

Some comments only supported wilderness in general (WG) or were opposed to wilderness in general (NWG).

TABLE V-1

CATEGORIES OF MAJOR CONCERNS IDENTIFIED
IN THE ANALYSIS OF PUBLIC COMMENT[1]

PRO-WILDERNESS

Areas of Concern (448 comments)	Percentage of Comments[2]	
	Written	Oral
1. The WSAs' solitude and primitive recreation values.	24%	8%
2. The protection of the Owyhee River ecosystem.	19%	6%
3. Concern for the enjoyment of wildlands by future generations.	9%	5%
4. Concern for the protection of special features (supplemental values) associated with the Owyhee River.	51%	14%
5. Concern over conflicting resource development or nonwilderness uses.	27%	45%
6. The economic benefits of wilderness.	7%	13%
7. Concern over amount of wilderness acreage recommended and the use of manageability adjustments.	54%	64%
GS. General support for wilderness.	4%	1%

ANTI-WILDERNESS

Areas of Concern (47 comments)	Percentage of Comments[3]	
	Written	Oral
1. The potential for water resource development.	9%	2%
2. The potential for mineral and energy development.	24%	22%
3. "Multiple use" versus the wilderness "lock up."	39%	52%
4. The economic impact of wilderness.	11%	26%
5. The impact of wilderness upon present recreation use and solitude opportunities.	11%	37%
6. The impact of wilderness on vegetation management.	7%	2%
7. The impact of wilderness on wildlife management.	7%	7%
8. The manageability of BLM desert wilderness.	7%	17%

1 Based upon 495 out of 520 comments; 25 comments did not specifically support either wilderness or no wilderness.
2 Percentages based upon 448 comments in support of wilderness designation.
3 Percentages based upon 46 comments opposed to wilderness designation.

TABLE V-2
OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments

#	Name	Address	Alt.	Concern
1	Don Childs	Stanfield, OR	WG	P-3,4
2	Michael Baldwin	Seattle, WA	AW	P-2,7
3	Michael Denny	Portland, OR	WG	P-1
4	L.D. Robertson	Portland, OR	WG	P-1,4
5	Adirondack Council	Elizabethtown, NY	PA	P-4,7
6	Gale A. Granger	Laguana Beach, CA	PA	P-2,4,5,6
7	Julia C. Welch	Caldwell, ID	PA	P-4,7
8	Pamela Potter	Ontario, OR	PA	P-3,4
9	Florence L. Orth	Vernon, FL	PA	P-3,4
10	Shoshone-Paiute Tribes	Owyhee, NV	--	A-1
11	Ruth Acord	Medford, OR	PA	GS
12	Tom R. Sewell	Missoula, MT	AW	GS
13	Charles R. Cater	La Grande, OR	WG	P-4
14	Robin Davies	Ontario, OR	PA	P-7
15	Wilderness River Outfitter	Salmon, ID	AW	P-2,4,7
16	Fred & Tandy McDonald	Burns, OR	PA	P-2,4,7
17	Wayne Heman	Spokane, WA	--	--
18	Bret Stanford	Salem, OR	PA	P-1,2
19	Mari L. Hoffman	Yakima, WA	AW	P-3
20	Rodney Keyser	Woodburn, OR	AW	P-5
21	Noranda Exploration	Missoula, MT	AW	A-2
22	John Bryant	Salmon, ID	AW	P-3
23	Gary Reeser	Medford, OR	AW	A-3
24	David T. Harris	Okanogan, WA	AW	P-1,5
25	David & Sheila Mills	Hailey, ID	PA	P-3,5,6
26	Elliott Bernshaw	Blairmore, Alberta	AW	GS
27	Martin J. Gabica	Boise, ID	PA	GS
28	Michael Walsh	Salmon, ID	AW	P-3,4,7
29	Hadley B. Roberts	Salmon, ID	WW	P-4,7
30	John P. Brown	Medford, OR	AW	P-3
31	Lawrence Nielsen	Redmond, OR	PA	P-4,6
32	Martin Albert	Charlottesville, VA	AW	P-4
33	Bob Doppelt	Eugene, OR	AW	P-7
34	Lyndell Jackson	Salmon, ID	PA	GS
35	Elizabeth Day	Salmon, ID	PA	GS
36	Wesley Chitwood	Terrebonne, OR	NW	A-4
37	Clive Lister	Seattle, WA	PA	P-4
38	William Nyquist	Boise, ID	AW	P-3,7
39	Fran Tonsmeire	Salmon, ID	AW	P-3
40	Berta Youtie	Moscow, ID	AW	P-1,3,4,7
41	Katie Richardson	Salmon, ID	AW	P-4
42	Don L. Crawford	Moscow, ID	CIHD	P-2,4,7
43	Pam Shea	Moscow, ID	CIHD	P-7
44	Richard R. Smith	Salmon, ID	AW	P-1,5
45	Brooks Montgomery	Salmon, ID	AW	GS
46	Chuck McDonald	Salmon, ID	AW	GS

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
47	Gary S. Jackson	Salmon, ID	PA	GS
48	George Wuerthner	Missoula, MT	AW	P-1,7
49	Federal Aviation Admin.	Seattle, WA	--	--
50	Melanie Hutchinson	Twin Falls, ID	WG	GS
51	Roger C. Garrett	Tigard, OR	CIHD	P-4
52	Stephen Brown	Portland, OR	CIHD	P-4,7
53	Jack Herbert	Darby, MT	WW	P-1
54	Dave Neuman	Hailey, ID	CIHD	P-3,4,7
55	Andy Bartels	Portland, OR	AW	GS
56	Harold Dunn	Springfield, OR	NW	A-3,5
57	Mari Hoffman	Yakima, WA	WG	P-3,4
58	Oregon Dept. of Transportation, Parks & Recreation Division	Salem, OR	--	--
59	Michael P. Healy	Hailey, ID	AW	P-7
60	Jeaetie Germain	Boise, ID	CIHD	P-6,7
61	Donald Cohen	Hailey, ID	CIHD	P-4
62	Steve & Betty Slifer	Filer, ID	CIHD	P-7
63	Patricia Davenport	Ketchum, ID	CIHD	P-4,7
64	Schuyler S. Judd	Island Park, ID	CIHD	P-4,7
65	John McGown, Jr.	Boise, ID	CIHD	P-1,7
66	Andrea Foster	Weiser, ID	CIHD	P-1,4,7
67	S.J. Walsh	San Francisco, CA	CIHD	P-4
68	Richard & Gail Millimak	Boise, ID	CIHD	P-3,7
69	Mike Denney	Portland, OR	AW	P-7
70	James H. Morgan	Portland, OR	CIHD	P-1,3,4,6,7
71	Tony Tabert	Post Falls, ID	AW	P-4
72	Susan E. Cox	Portland, OR	CIHD	P-7
73	Robert W. Martin	Sandpoint, ID	CIHD	P-7
74	Robert G. Thomas	Coeur d'Alene, ID	CIHD	GS
75	Dennis Baird	Moscow, ID	CIHD	P-7
76	Robert W. Heavey	Brookings, OR	AW	P-4,6
77	William A. Warren, Jr.	Moscow, ID	CIHD	P-1,4
78	Patrick Holzwarth	Portland, OR	AW	P-7
79	Jeff Thieret	Portland, OR	CIHD	P-1,4,7
80	Blaine Mooers	Missoula, MT	PA	P-4
81	I. Gloekler	Portland, OR	CIHD	P-1,4,7
82	American Alpine Club	New York, NY	CIHD	P-1,4,6,7
83	Gayle Morrow-West	Hailey, ID	CIHD	P-7
84	M.M. Holzwarth	Portland, OR	AW	P-3,4
85	Lori L. Neuman	Darlington, WI	AW	P-4
86	Lee Rosenbaum	Beaverton, OR	CIHD	P-1,4,7
87	Susan Carr	Beaverton, OR	CIHD	P-1,4,7
88	Tom R. Sewell	Missoula, MT	CIHD	P-4,7
89	Steve Gretzinger	Corvallis, OR	CIHD	P-1,4
90	Scott Voja	Union, OR	AW	P-4,5
91	Idaho Outfitters & Guides Association	Boise, ID	CIHD	P-1

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
92	Ramon Latham	Boise, ID	AW	P-4,5
93	Alan Reynolds	Ketchum, ID	AW	P-1,4
94	Sharon Hatch	Lewiston, ID	CIHD	GS
95	Bruce West	Hailey, ID	CIHD	P-7
96	Christine Shore	Portland, OR	CIHD	P-4,6,7
97	Oregon State Clearinghouse	Salem, OR	--	--
98	Oregon Dept. of Transportation, Parks & Recreation Division	Salem, OR	--	--
99	Oregon Dept. of Agric.	Salem, OR	--	A-1,3,4
100	Oregon Dept. of Fish & Wildlife	Salem, OR	--	--
101	Ogden Kellogg, Jr.	Gold Hill, OR	CIHD	P-1,4,7
102	Richard F. Paris	Hailey, ID	CIHD	P-7
103	Judi Zuckert	Boise, ID	AW	P-4,7
104	Mr. & Mrs. John Bryant	Salmon, ID	AW	P-2
105	Fred W. Rabe	Moscow, ID	AW	P-4,6,7
106	Maxine M. Jenson	Brookings, OR	AW	GS
107	Ron Watters	Pocatello, ID	CIHD	P-7
108	Hildegard Raeber	Ketchum, ID	CIHD	P-1,2,4,7
109	Bruce C. VanKleek	Aloha, OR	CIHD	P-1,4,7
110	David Back	Lewiston, ID	CIHD	GS
111	Stanley O. Shepardson	Bend, OR	PA	P-6,7
112	Barbara Howard	Boise, ID	AW	P-6
113	Thomas A. Wondell	La Grande, OR	CIHD	P-1,4,5,6,7
114	Richard Anderson	Jackson, NH	AW	P-1,7
115	Elaine Rees	Coos Bay, OR	CIHD	P-4,5,6,7
116	Tom Conrad	Carmen, ID	AW	GS
117	Rayola Jacabson	Grand View, OR	--	--
118	Joseph Maria	Corvallis, OR	CIHD	P-4
119	Roger Applegate	Pocatello, ID	CIHD	P-1,4,5
120	Pamela A. Stunz	Sun Valley, ID	CIHD	P-1,3,4
121	M. Meyer	Eugene, OR	CIHD	P-7
122	Eugene C. Brown	Monmouth, OR	CIHD	P-3
123	Elizabeth J. Black	Grants Pass, OR	CIHD	P-2,4,7
124	Roger Brooks	Newport, OR	CIHD	P-1,2,4,7
125	R. Marrimer Orum	Eugene, OR	CIHD	P-4,7
126	Curt Mitchell	Lorane, OR	CIHD	P-3
127	Bob Atiyeh	Portland, OR	AW	P-4
128	Michael Bohannon	Enterprise, OR	CIHD	P-6,7
129	Timothy A. Dragila	Portland, OR	WG	P-2,7
130	Virginia Coen	Baker, OR	CIHD	P-2,4,7
131	Michael S. Andrews	Gresham, OR	CIHD	P-2,4,5
132	Fred Sawyer	Portland, OR	CIHD	P-2,7
133	C.E. Francis	Bend, OR	CIHD	P-4,5,7
134	William B. Newby	Selma, OR	CIHD	P-2,7
135	John Meyer	Salem, OR	CIHD	P-4,7
136	William Barber	Veneta, OR	CIHD	P-4,5

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
137	Forest & Valerie Taylor	North Bend, OR	CIHD	P-5,7
138	John W. Hitchcok	McMinnville, OR	CIHD	P-7
139	Ed Sargent III	Shedd, OR	AW	P-7
140	Olo & Vinel Kilgemagi	Corvallis, OR	CIHD	P-4,7
141	Stanley G. Jennett, Jr.	West Linn, OR	CIHD	P-4
142	Jerry Haram	Portland, OR	CIHD	P-1,4,7
143	William L. Sullivan	Eugene, OR	CIHD	P-4,7
144	Carol Rodriguez	Eugene, OR	CIHD	P-7
145	National Public Lands Task Force	Carson City, NV	CIHD	P-1,3,4,7
146	MAPCO Minerals Corp.	Jordan Valley, OR	NW	A-2
147	Ardath G. Avel	Portland, OR	CIHD	P-1,4,6,7
148	Robert Jones	Pocatello, ID	CIHD	P-1,4,6,7
149	L. Hanson	Humoso, SD	CIHD	P-3
150	Dick & Linda Arnold	Bishop, CA	CIHD	P-3,4
151	Martha Olson	Sun Valley, ID	CIHD	P-4,7
152	Idaho Alpine Club	Idaho Falls, ID	CIHD	P-1,4,7
153	Ruth Herrington	Boise, ID	CIHD	P-4,7
154	Clifford B. Pereira	Corvallis, OR	CIHD	P-7
155	L.M. Olson	Portland, OR	CIHD	P-1,4,7
156	Frank Vaughn	Lakeview, OR	NW	A-2,5,6,8
157	Malheur County Court	Malheur, OR	NWG	A-3
158	Mark Bello	Portland, OR	CIHD	P-1,2,4,5,7
159	Sue Connolly	Mad River, CA	CIHD	P-1,2,4,5,7
160	Jane A. Wittmeyer	Boise, ID	NW	A-3
161	Barry Clock	Toledo, OR	--	--
162	Terry Woodin	Reno, NV	CIHD	P-2,4,5,7
163	Walt Cundiff	Tigard, OR	WS	P-3,5
164	Paul Fritz (American Wilderness Alliance)	Boise, ID	CIHD	P-7
165	Robert A. Forte	Mad River, CA	CIHD	P-1,2,4,5,7
166	Richard H. Pough (Natural Area Council)	New York, NY	CIHD	P-1,4,7
167	Brad Griffith	Dayville, OR	CIHD	P-4,7
168	Mazamas	Portland, OR	CIHD	P-1,2,7
169	Betty R. Matzek	Eagle, ID	CIHD	P-4,5,7
170	Gamewell D. Gantt	Pocatello, ID	CIHD	P-5,7
171	Nancy & Cutler Umback	McCall, ID	CIHD	P-4,5,7
172	Anne Jacobs	Portland, OR	CIHD	P-1,2,4,5,7
173	Nan Bryant	Salmon, ID	AW	P-2
174	Chad Gibson	Homedale, ID	NW	A-3,7
175	Michael Woods	Bellevue, ID	AW	P-2,5
176	Renee Lamoreaux	La Grande, OR	CIHD	P-2,4,5,7
177	Bureau of Reclamation	Boise, ID	--	A-1
178	Nancy Sosnore	Everett, WA	CIHD	P-5,7
179	Soil Conservation Service	Boise, ID	--	--
180	Ted Heinrich	Ithica, NY	CIHD	P-2,4,7
181	Dan Tonsmeiere	Carrabelle, FL	AW	P- 2,3,4

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
182	Julie Carvelle	Tahoe City, CA	CIHD	P-1,2,4,5,7
183	Phil Gratz	Boise, ID	CIHD	P-2,4,5,7
184	Bruce O. Philrick	Mountain Home, ID	AW	P-1,4
185	Sevy Guide Service	Sun Valley, ID	PA	P-1,2,4,5
186	Robert W. Evinger	Salem, OR	PA	P-2,5
187	David Clopton	Boise, ID	CIHD	P-1,4,7
188	Ann E. Penfield	Truckee, CA	CIHD	P-1,2,4,5,7
189	F. Penfield	Truckee, CA	CIHD	P-1,2,4,5,7
190	Ethel W. Thorniley	Detroit, MI	AW	GS
191	Donna Redmond	Reno, NV	CIHD	P-1,2,4,5,7
192	Kurt Duey	Bellingham, WA	CIHD	P-4,5,7
193	Larry Chinn	Darby, MT	CIHD	P-1,2,3,4,5,7
194	Mary Shrier	Darby, MT	CIHD	P-1,4,5,6,7
195	Charles Mabbott	Darby, MT	WW	P-4,5
196	Barry F. Anderson	Portland, OR	--	--
197	William & Jean Leavell	Salmon, ID	PA	P-3,6
198	Kimberly Knox	Portland, OR	CIHD	P-1,2,4,5,7
199	Christopher J. Ives	Springfield, MO	--	--
200	Barry M. Clock	Toledo, OR	NW	A-3
201	Gerold Gwathney	Berkeley, CA	EF	P-7
202	Charles H. Inman	Ashland, OR	WG	P-1,4,5,7
203	Gerald Jayne	Idaho Falls, ID	CIHD	P-2,4,5,7
204	James & Laura Woodward	Stanley, ID	CIHD	P-4,5,7
205	Pauline D. Plaza (Audubon Society)	Boulder, CO	CIHD	P-1,4,5,7
206	Rick Sorensen	Stanley, ID	CIHD	P-4,5,7
207	Southwestern Idaho Development Assoc.	Boise, ID	NW	A-3,4
208	Johnny Joe Bryant	Salmon, ID	AW	P-2
209	Daniel A. Poole (Wildlife Management Institute)	Washington, D.C.	AW	P-5
210	Josephine Kerr	Picabu, ID	CIHD	P-3,4,7
211	Kurt J. Kremlick, Jr.	Boise, ID	AW	P-4,7
212	Robert Weed	Escalante, UT	EF	P-7
213	Jack Hathaway	Sparks, NV	CIHD	P-1,4,7
214	John R. Swanson	Berkeley, CA	EF	P-3,4,7
215	Barbara Lynes	Darby,MT	CIHD	P-4,5,7
216	Alvin P. Larrick	Richland, OR	AW	GS
217	Kent Erskine	Ashland, OR	PA	P-7
218	Mark Ireland	Reno, NV	CIHD	P-1,4,7
219	Walter Hunner	Coulee Dam, WA	CIHD	P-4,7
220	Bill Gifford	Portland, OR	CIHD	P-4,7
221	Paul McClellan	Corvallis, OR	WG	P-4,7
222	Julie R. Kierstead (Berry Botanic Garden)	Portland, OR	CIHD	P-4,7
223	Hughes River Expeditions	Cambridge, OR	PA	P-1,4,6
224	Northwest Environmental Defense Center	Portland, OR	CIHD	P-5,6,7

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
225	Earth First	Chico, CA	EF	P-5,6,7
226	S. Glum	Brookings, OR	CIHD	GS
227	Karen Costa	Salem, OR	CIHD	P-4,7
228	David K. Smith	San Francisco, CA	CIHD	P-4,7
229	Paul Morgan	Prairie City, OR	EF	P-3,4,7
230	Louise Jacobus	Portland, OR	CIHD	P-1
231	Daniel K. Mizner	Darby, MT	AW	P-3,7
232	Dusty Young	Hailey, ID	CIHD	P-3,7
233	Robert Mueller	Stounton, VA	EF	P-4,7
234	William H. Mullins	Boise, ID	AW	P-1,2,4
235	T.T. Bourgeois	Lakeview, OR	AW	P-2,3,4,6
236	Oregon Farm Bureau	Salem, OR	NW	A-1,3,4,5,6,7,8
237	Mary K. Connolly	Boise, ID	CIHD	P-4,5,6,7
238	Tipperman	New York, NY	CIHD	P-4,5,7
239	Jim Edwards	Reno, NV	CIHD	P-4,5,7
240	Sid Friedman	Newberg, OR	EF	P-1,7
241	M. Searle	San Francisco, CA	EF	P-1,7
242	Harry Melts	Porthill, ID	CW	P-1,7 A-3,5
243	Martha J. Huffstutter	Portland, OR	CIHD	P-4,7
244	Bob Honsinger	Tetonia, ID	PA	P-1,4
245	Ross W. Smith	Reno, NV	CIHD	P-4,7
246	Margaret & Peter Dordel	Chicago, IL	CIHD	P-2,4,5,7
247	Debbie Redmond	Roseburg, OR	CIHD	P-2,4,5,7
248	John Davis	Georgetown, KY	EF	P-5,7
249	Cal Elshoff	Bend, OR	AW	P-1
250	S. Brook Smith	Boise, ID	AW	P-4,5
251	John O. Koenig	Elmira, OR	CIHD	P-4,5,7
252	Marjorie Sill	Reno, NV	CIHD	P-1,4,7
253	C.T. Kien, Cal Lewis, David Hugh, Roy G. Jones	Elko, NV	AW	P-4
254	Oregon Dept. of Fish & Wildlife	Portland, OR	CW	P-7
255	Jeremy Fried	Corvallis, OR	CIHD	P-4,5,7
256	Donald Parks	Redmond, WA	AW	P-1,2,4,5,7
257	Sandra G. Shapiro	Wilsonville, OR	CIHD	P-2,4,5,7
258	Idaho Power Company	Boise, ID	--	A-2
259	U.S. Fish & Wildlife Service	Boise, ID	PA+	P-1,4,5,7
260	Roger Samelson	Corvallis, OR	CIHD	P-1,4,7
261	Robert M. Hughes	Corvallis, OR	AW	P-1,2,4,5,7
262	Jeffrey C. Feredax	Boulder, CO	CIHD	P-1,4,6,7
263	Catherine Williams	Portland, OR	CIHD	P-1,4,7
264	Hall Williams	Portland, OR	CIHD	P-1,4,6,7
265	Gina L. Wall	Redondo Beach, CA	CIHD	P-2,4,5,7
266	P.W. Chase	Bend, OR	CIHD	P-4,5,7
267	Robert Tafanelli	Las Cruces, NM	EF	P-4,5,7
268	Bruce McCullough	Estacada, OR	CIHD	P-1,4,5,7
269	Walter & Dorothy Pelech	Tucson, AZ	EF	P-2,4,7

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
270	Merlin A. McColm	Elko, NV	CIHD	P-3,4,5,7
271	James M. Mouse, Jr.	Sacramento, CA	CIHD	P-2,4,5,7
272	Richard A. Weaver	Loomis, CA	PA	P-4,5
273	Michael Kulesza	Salmon, ID	CIHD	P-1,2,4,7
274	Pete Bradley	Reno, NV	CIHD	P-4,5,7
275	Franzier Michol	John Day, OR	CIHD	P-5,7
276	Dorinda L. Pollock	Payette, ID	EF	P-4,7
277	Ric Bailey	Joseph, OR	EF	P-7
278	Donna Edwards	Reno, NV	CIHD	P-2,4,5,7
279	Buck Davis	Bend, OR	PA	P-5
280	Idaho Dept. of Fish & Game	Boise, ID	PA	P-4
281	Nancy Oesau	Prairie City, OR	EF	P-1,4,5,7
282	Peter R. Wyman	Spokane, WA	CIHD	P-1,2,3,4,5,7
283	Peter A. Bowler	Bliss, ID	CIHD	P-2,4,5,7
284	Sierra Club	Las Vegas, NV	CIHD	P-4,5,7
285	Mike Boylston	Ketchum, ID	CIHD	P-4,7
286	Suzanne J. Smither	Salem, OR	CIHD	P-1,4,5,7
287	William H. Hoffman	Corvallis, OR	CIHD	P-1,2,4,5,7
288	Jerry L. Wegman	Moscow, ID	PA	GS
289	Kurt P. Herzog	Grants Pass, OR	AW	P-3,4,5,7
290	Susan Schroeder	Evanston, IL	EF	P-3,7
291	Linda S. Craig (Audubon Society)	Portland, OR	CIHD	P-2,4,5,7
292	Leroy C. Heinse	Mountain Home, ID	AW	P-7
293	Darlene Emry	Boise, ID	CW	P-4,7
294	Jill Wyatt	Bremerton, WA	CIHD	P-3,4,5,7
295	Wildlife Society	Boise, ID	PA+	P-4,5,7
296	Randall E. Morris	Mountain Home, ID	CIHD	P-1,2,4,5,7
297	Nevada State Office of Community Services	Carson City, NV	PA	--
298	Nevada Dept. of Wildlife	Reno, NV	PA	P-2,4,5
299	Nevada Div. of State Parks	Carson City, NV	PA	P-1
300	Nevada Division of Historic Preservation and Archaeology	Carson City, NV	--	P-4
301	Nevada Bureau of Mines & Geology	Reno, NV	--	A-2
302	Wilderness Society	Boise, ID	CIHD	P-1,2,3,4,5,6,7
303	Exxon Company USA	Denver, CO	CW	P-7 A-2
304	Golden Eagle Audubon Soc.	Boise, ID	CIHD	P-4,5,7
305	Gold Fields Mining Corp.	Lakewood, CO	NW	A-2
306	Committee for Idaho's High Desert	Boise, ID	CIHD	P-1,2,4,5,7
307	Panhandle Environmental League	Sandpoint, ID	CIHD	P-1,2,4,7
308	Defenders of Wildlife	Washington, D.C.	CIHD	P-4,5,7
309	Jack O'Dell (Francis Peak Gem & Mineral Society)	Centerville, UT	NWG	A-3

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
310	Janene Sims	Centerville, UT	NWG	A-3
311	Harold Sims	Centerville, UT	NWG	A-3
312	Dorothy Sandmire	Centerville, UT	NWG	A-3
313	Marvin E. Sandmire	Centerville, UT	NWG	A-3
314	Glen L. Anderson	Centerville, UT	NWG	A-3
315	Steven Lock	Darby, MT	CIHD	P-1,4,5,7
316	Bruce Bowler	Boise, ID	CIHD	P-4,5,6,7
317	Priscilla K. Coe	La Grande, OR	AW	P-7
318	Chris Counts	Portland, OR	CIHD	P-1,4,7
319	James Phelps	Billings, MT	CIHD	P-4,5,7
320	Marilyn Gifford	Portland, OR	CIHD	P-4,5,7
321	Anita Andrus	Salmon, ID	CIHD	P-4,5,7
322	Bruce M. Hayse	Lava Hot Springs, ID	CIHD	P-1,4,7
323	Willis Brown	Potlach, ID	CIHD	P-4,7
324	Julia Bent	Seattle, WA	PA	P-1,4,6
325	Lane County Audubon Soc.	Eugene, OR	AW	P-1,2,4,5
326	Jon Marvel	Hailey, ID	CIHD	P-1,2,7
327	John W. Fisher	Lewiston, ID	CIHD	P-1,2,4,5,7
328	Susanne Vader	Boise, ID	CIHD	P-1,2,4,7
329	Geoff Smith	Berkeley, CA	EF	P-4,5,7
330	Charles R. Baker	Homedale, ID	--	--
331	Steve Jakabowics	Boise, ID	CIHD	P-1,2,4,6,7
332	R.R. Miller	Boise, ID	CIHD	P-1,4,5,7
333	L.A. Miller	Boise, ID	CIHD	P-1,4,5,7
334	Joseph ?	Boise, ID	CIHD	P-1,4,5,7
335	Michael J. Kellett	Ann Arbor, MI	AW	P-7
336	David Mishkin	Lake Havasu City, AZ	CIHD	P-5,7
337	Ted Weigold	Boise, ID	AW	P-2,4,5,6
338	Kent Coe	La Grande, OR	EF	P-1,7
339	Richard T. Brown	Portland, OR	CIHD	P-1,2,4,7
340	Char Roth	McCall, ID	CIHD	P-4,5,7
341	Deanna Mueller-Crispin	Portland, OR	CIHD	P-2,4,7
342	Byron Rendar	Portland, OR	CIHD	P-7
343	Mark J. Wilk	Ontario, OR	CIHD	P-1,2,4,5,7
344	Charles A. Wellner	Moscow, ID	AW	P-2
345	Nancy E.M. May	Edwards, WA	CIHD	P-2,4,5,7
346	Michael Colavito	Chappaqua, NY	CIHD	P-2,4,7
347	Idaho Conservation League	Boise, ID	CIHD	P-1,2,4,5,7
348	John Bertram	Boise, ID	CIHD	P-1,4,5,7
349	Susan Bertram	Boise, ID	CIHD	P-1,4,5,7
350	Lynne M. Schnupp	Boise, ID	CIHD	P-2,4,5,6,7
351	Joseph W. Hinton	Portland, OR	CIHD	P-2,4,7
352	Sierra Pacific Power Co.	Reno, NV	NW	A-2
353	Kalmiopsis Action Comm.	Williams, OR	EF	P-4,7
354	Brian Hutchesson	Ashton, ID	CIHD	P-4,7
355	Deborah Richie	Prairie City, OR	CIHD	P-1,4,7
356	Douglass A. Pineo	Pullman, WA	--	--
357	Steve Kramer	Eugene, OR	EF	P-1,2,4,5,6,7

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Written Comments (con't.)

#	Name	Address	Alt.	Concern
358	Craig Miller	Bend, OR	EF	P-2,5,7
359	Jerry Kauffman	San Jose, CA	CIHD	P-1,4,5,7
360	M. Medberry	McCall, ID	CIHD	P-4,7
361	Teresa A. Maurer	Corvallis, OR	CIHD	P-1,2,4,5,7
362	Sierra Club	Boise, ID	CIHD	P-7
363	Lois & John E. Barry	La Grande, OR	CIHD	P-7
364	Oregon Natural Resource Council	Eugene, OR	CIHD	P-2,4,5,7
365	John L. Frewing	Portland, OR	CIHD	P-5,7
366	Ramona J. Pascoe	Jordan Valley, OR	CW	P-7 A-3,4,5,6,7,8
367	Jennifer Holmes	Palo Alto, CA	EF	P-1,2,4,5,7
368	John & Margi Timm	Lebanon, OR	NW	A-3,4,5
369	Atlantic Richfield Co.	Denver, CO	--	A-2
370	Dave Stone	Eugene, OR	CIHD	P-1,4,7
371	Oregon Natural Resources Council	Prairie City, OR	CIHD	P-1,2,4,5,7
372	Kevin Bopp	Darby, MT	CIHD	P-7
373	Robert Deering	Portland, OR	CIHD	P-2,4,5,6,7
374	Department of the Air Force	San Francisco, CA	WG	P-5
375	David Herbet	Corvallis, OR	AW	P-4,5,7
376	Chuck & Shirley Spaeth	Tequesta, FL	CIHD	P-4,5,7
377	Steve & Laura Mieser	Portland, OR	CIHD	P-4,5,7
378	Dept. of Energy, Bonneville Power Admin.	Portland, OR	--	A-2
379	Dorian Duffin	Boise, ID	CIHD	P-1,2,4,7
380	Trista Hoffman	Canyon City, OR	CIHD	P-2,4,5,7
381	Jim Marotta-Jaenecke	San Mateo, CA	EF	P-2,3,4,5,7
382	Nevada Dept. of Minerals & Geology	Carson City, NV	--	A-2
383	George Early	Park Ridge, IL	PA	GS
384	U.S. Environmental Protection Agency	Seattle, WA	--	--
385	Fred C. Felter	Portland, OR	AW	P-7
386	Nancy Helget & Peter Eels	Pendleton, OR	CIHD	P-7
387	Steve Johnston	Ashland, OR	CIHD	P-4,7
388	Dianna Wale	Roseburg, OR	CIHD	P-4,7
389	Marilyn Hughes	???	CIHD	P-4,7
390	Keith Hatch	Corvallis, OR	CIHD	P-7
391	Norm & Shelley Cimon	La Grande, OR	AW	P-2,4,7
392	Idaho Air National Guard	Boise, ID	NW	A-5,8
393	Army Corp of Engineers	Walla Walla, WA	--	A-1,2
394	Army Corp of Engineers	Walla Walla, WWA	--	A-1,2

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Oral Testimony

#	Name	Address	Alt.	Concern
	Jordan Valley Public Hearing, April 10, 1984			
1	Grant Baugh	Ontario, OR	CW	P-1,7 A-5,8
2	Mike Hanley (Owyhee Cattle men's Action Comm/Malheur County Cattle Assoc./ Malheur County Court)	Jordan Valley, OR	NW want WSR Alt.	A-3,5,8
3	Ted Weigold	Boise, ID	AW	P-2,3,4,5
4	Randall Morris (CIHD)	Mountain Home, ID	CIHD	P-1,2,4,5,7
5	Michael Leighton	Ontario, OR	NW	A-3,5
6	Robert Skinner (Oregon Cattlemen's Association)	Jordan Valley, OR	NWG	A-3,4,8
7	Theodore T. Cowgill	Jordan Valley, OR	NW	A-4
8	Jim Anderson	Jordan Valley, OR	CW	P-7 A-3,4,7,8
9	Philip Geertson	Adrian, OR	NWG	
10	William Ross	Jordan Valley, OR	CW	P-7 A-3,4,5,7,8
11	Larry Jeppesen	Boise, ID	CIHD	P-6,7
12	Philip Heinrich	Boise, ID	CIHD	P-1,4,5,7
13	Steve Jaqubowics	Boise,ID	CIHD	P-1,2,47
14	Gene Davis (Idaho Cattle-men's Association)	Bruneau, ID	NW want WSR	A-3,4,5,8
	Boise Public Hearing, April 11, 1984			
15	Alfred Perry	Boise, ID	PA	P-2,4,5,7
16	Alan Hausrath (Idaho Environmental Council)	Boise, ID	CIHD	P-4,5,6,7
17	John Marshall	Boise, ID	PA	P-2,4,5,7
18	Janet Ward (American Assoc of University Women)	Boise, ID	AW	P-5,7
19	Stanley Gilbertson (Idaho Gem Club)		CW	P-3,4 A-3,5
20	Dave Bivens (Idaho Cattle-men's Association)	Payette, ID	NW	A-3,4,5
21	Richard Lingenfelter	Boise, ID	CIHD	P-3,5,7
22	Wayne Peterson (Ada County Fish & Game League)		CIHD	P-3,4
23	Jack Trueblood (Idaho (Sportsmen's Coalition)	Nampa, ID	CIHD	P-1,3,4,5,7
24	Ellen Trueblood	Nampa, ID	CIHD	P-2,4,5,7
25	Ted Weigold	Boise, ID	CIHD	P-2,6
26	Wally Sterling (Idaho Trail Machine Assoc.)	Boise, ID	WW	P-5,7 A-5
27	George Whitmore	Boise, ID	AW	P-4
28	William Meiners (Idaho WIldlife Federation)	Meridian, ID	CIHD	P-1,2,4,6,7
29	Robert Tyler	Boise, ID	CIHD	P-1,2,4,7

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Oral Testimony (con't.)

#	Name	Address	Alt.	Concern
	Boise Public Hearing (con't.)			
30	Bruce Boccard (Comm. for Idaho High Desert)	Boise, ID	CIHD	P-1,2,4,5,7
31	Rayola Jacobsen (Idaho Farm Bureau Federation)	Grand View, ID	NW	A-3
32	Al McGlinski	Boise, ID	CIHD	P-3,4,7
33	Lois Fry	Boise, ID	CIHD	P-4,5,7
34	Paul Nettleton	Murphy, ID	NW	A-3,5
35	George Kellog (Sagebrush Rebellion)	Nampa, ID	NW	A-3
36	Stacie Groll (BSU Conservation Group)	Boise, ID	CIHD	P-1,2,4,5,7
37	David Clopton	Boise, ID	CIHD	P-7
38	Brent Knapp	Boise, ID	CIHD	P-1,2,3,4,5,7
39	Long Jorgensen	Boise, ID	CIHD	P-4,7
40	Susanne Vader	Boise, ID	CIHD	P-1,2,5,6,7
41	Dorian Duffian	Boise, ID	CIHD	P-1,4,5,7
42	David Hawk	Boise, ID	--	A-2,5
43	Brian Schaeffer	Boise, ID	CIHD	P-1,4,6
44	Jim Baker (Sierra Club)	Salt Lake City, UT	CIHD	P-7
45	Steve Grantham	Boise, ID	CIHD	P-2,4,5,7
46	Cheryl Brower	Boise, ID	CIHD	P-2,4,5,7
47	Jack Streeter	Mountain Home, ID	NWG	A-3,4
48	Frederick Ward	Boise, ID	AW	P-5
49	Howard Emry (NW Federation Mineralogical Societies)	Boise, ID	CW	P-4,5,7 A-5,8
50	Philip Heinrich	Boise, ID	CIHD	P-4
51	Charles Yoder (Sierra Club)	Boise, ID	AW	P-1,2,4,5,6
52	Harold Miles (Id. Consumer Affairs)	Nampa, ID	CIHD	P-2,4,5,6,7
53	Gai Llewellyn	Boise, ID	CW	A-3
54	Ed Wardwell	Boise, ID	CIHD	P-3,,5
55	Richard Bass (Owyhee County Commissioners)	Murphy, ID	NW/ WSR	A-3
56	Wendell Collins	Jordan Valley, OR	NW/ WSR	A-3
57	Edwina Allen	Boise, ID	CIHD	P-1,3,4,7
58	Rob Scanland (45 Ranch)	Elko, NV	CW/ WSR	P-7 A-3,4,5,6
59	Keith Tondrick	Boise, ID	CIHD	P-1,2,4,5,6,7
60	Michael Jones	Boise, ID	CIHD	P-5
61	Twyla Montano	Boise, ID	NW	A-3,4,5
62	Randy Morris	Mountain Home, ID	CIHD	P-2,3,5,7
63	Tim Lowry	Jordan Valley, OR	NW/ WSR	A-3,5

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Oral Testimony (con't.)

#	Name	Address	Alt.	Concern
	Portland Public Hearing, April 12, 1984			
64	Les Simpson (Isaac Walton League)	Eugene, OR	PA	P-4,7
65	Don Tryon	Prineville, OR	CIHD	P-7
66	Larry Ulrich	Bend, OR	NW	A-5
67	Howard DeLano (Oregon Cattlemen's Association)	Oregon City, OR	CW	P-7 A-3,4
68	Ruth Robbins	Portland, OR	CIHD	P-1,3,4,5,7
69	Jeff Crook	Boring, OR	CIHD	P-4,7
70	Michael Houck	Portland, OR	CIHD	P-1,4,7
71	Lynn Herring (Portland Audubon Society)	Portland, OR	CIHD	P-4,5,7
72	John Davis	Portland, OR	CIHD	P-4,7
73	Jeanne Norton	Portland, OR	CIHD	P-4,7
74	George Zimmerman	Portland, OR	CIHD	P-3,5,6
75	Ken Clock	Wilsonville, OR	NW	A-3,5,8
76	Elizabeth Hendler	Portland, OR	CIHD	P-4,5
77	Neal Nelson		PA	
78	Joe Walicki	Marylhurst, OR	CIHD	P-3,4,7
79	Andy Kerr (Oregon Natural Resources Council)		CIHD	P-1,2,4,6,7
80	Bruce McCullough	Estacada, OR	WG	P-2,4,5
81	Bruce Boccard (Committee for Idaho's High Desert)	Boise, ID	CIHD	P-4,5,7
82	Vera Dafoe (American Alpine Club)	Portland, OR	CIHD	P-2,4,6,7
83	Trygve Steen	Portland, OR	CIHD	P-4,7
84	Tony George	Salem, OR	AW	
85	Bob Powne	Portland, OR	CIHD	P-4,5,7
86	Glen Stream (Izaak Walton League)		CIHD	P-1,2,4,5,7
87	Linda Craig (Audubon Society)		CIHD	P-1,2,4,5,7
88	Jennie Peterson	Portland, OR	CIHD	P-2,3,4,5
89	Glen Vancise	Portland, OR	CIHD	P-1,2,5,7
90	Deborah Judson	Portland, OR	CIHD	P-1,3
91	John Marks	Portland, OR	AW	P-1,3,4
92	Kelly Smith (Sierra Club)	Corvallis, OR	CIHD	P-1,2,4,7
93	Dieter Mahlein (Or. Whitewater Enthusiasts)	Springfield, OR	CIHD	P-1
94	Julie Kierstead (Native Plant Society of Oregon/ Botanic Gardens)	Portland, OR	CIHD	P-4,5
95	Hal Williams	Portland, OR	CIHD	P-5
96	John Scott	Portland, OR	WG	P-7
97	John Frewing	Portland, OR	CIHD	P-6
98	Steve Miessen	Portland, OR	CIHD	P-5,7

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Oral Testimony (con't.)

#	Name	Address	Alt.	Concern
	Portland Public Hearing (con't.)			
99	Bill Oliver	Portland, OR	AW	P-5
100	Stanley Jewett	West Linn, OR	CIHD	P-3,4,7
	Reno Public Hearing, April 17, 1984			
101	Charlie Watson (Nevada Outdoor Recreation Assoc)		CIHD	P-2,3,4,7
102	Roger Scholl (Sierra Club)	Reno, NV	CIHD	P-1,7
103	Amy Mazza	Reno, NV	CIHD	P-1,4,7
104	Scott McDaniel (Nevada Department of Minerals)		--	A-2
105	Bob Warren (Nevada Mining Association)		NW	A-2,4
106	Charles Albright		CIHD	P-1,7
107	Rose Strickland (Sierra Club)		CIHD	P-4,5,7
108	Dennis Ghiglieri		CIHD	P-1,4
109	Steve Younkin (Sierra Pacific Power Company)		WG	P-7 A-2
110	Barbara Kelley	Reno, NV	CIHD	P-1,4,7
111	Terry Woodin	Reno, NV	CIHD	P-4,5,7
112	Elizabeth Brownson	Reno, NV	CIHD	P-1,4
	Elko Public Hearing, April 18, 1984			
113	Richard Reyburn (Nevada Department of Minerals)	Reno, NV	NW	A-2
114	Jack Streeter (Sagebrush Rebellion, Inc.)	Mountain Home, ID	NW	A-3
115	Terry Kien (Sierra Club)	Elko, NV	AW	GS
116	Merlin McCollum	Elko, NV	AW	P-1,4
117	Bill Bellinger	Elko, NV	NW	A-5

OWYHEE CANYONLANDS DEIS PUBLIC COMMENT LOG
Oral Testimony (con't.)

#	Name	Address	Alt.	Concern
	Multiple Use Advisory Council Meeting, May 24, 1984*			
118	Bryan Brunzell (Independent Petroleum Assoc. of the Mountain States)		NW	A-2
119	Loren Hughes	Albuquerque, NM	NW	A-2
120	Jane Leeson (Wilderness Society)	Boise, ID	AW	P-1,3,4,5,7
121	Andy Anderson (Idaho Farm Bureau)	------	NW	A-2,3,4,5
122	Mont Warner	Boise, ID	--	A-2
123	Bill Lowry	Jordan Valley, OR	NW	A-3
124	Howard Emry (Northwest Federation of Mineralogical Societies)	------	CW	A-2,5
125	Craig Blair	------	NW	A-3
126	William R. Meiners (Idaho Wildlife Federation)	Boise, ID	AW	P-2,3,4,7

* Following the receipt of testimony and the presentation of resource information, the Boise District Multiple Use Advisory Council made a No Wilderness (NW) recommendation for the Owyhee Canyonlands WSAs.

Publication of Public Comments

This final EIS contains a reproduction of all written comments from federal, state and local governments, elected officials, and from organizations (or businesses) which were received concerning the draft Owyhee Canyonlands Wilderness EIS. Oral comments from government agencies, elected officials or organizations are not reproduced unless they required a written response from the BLM. Both written and oral comments from individuals are reproduced in the final EIS only if a written response from the BLM is provided. Unpublished written comments are on file at the Boise District Office. All oral comments on the draft EIS are contained in the official hearing record also on file at the Boise District Office.

TABLE V-3

PUBLIC COMMENTS ON DRAFT OWYHEE CANYONLANDS WILDERNESS EIS
BY GOVERNMENT, ORGANIZATION AND INDIVIDUAL

Federal Government Name of Agency	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Shoshone-Pauite Tribes	10	*		*	36
Federal Aviation Administration	49	*			35
Bureau of Reclamation	177	*		*	43
Soil Conservation Service	179	*			43
U.S. Fish & Wildlife Service	259	*			52
Dept. of the Air Force	374	*			78
Dept. of Energy, Bonneville Power Administration	378	*		*	79
Environmental Protection Agency	384	*		*	83
Army Corp of Engineers	393	*			85
Army Corp of Engineers	394	*			85

State Government Name of Agency	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Oregon Dept. of Transportation, Parks & Recreation Division	58	*			36
Oregon State Clearinghouse	97	*			37
Oregon Dept. of Transportation, Parks & Recreation Division	98	*			37
Oregon Dept. of Agriculture	99	*			37
Oregon Dept. of Fish & Wildlife	100	*			38
Oregon Dept. of Fish & Wildlife	254	*			51
Idaho Dept. of Fish & Game	280	*			53
Nevada State Office of Community Services	297	*			58

TABLE V-3 (continued)

State Government Name of Agency	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Nevada Dept. of Wildlife	298	*			59
Nevada Division of State Parks	299	*			59
Nevada Division of Historic Preservation & Archaeology	300	*			59
Nevada Bureau of Mines & Geology	301	*			59
Nevada Dept. of Minerals & Geology	382	*			83
Idaho Air National Guard	392	*		*	83
Nevada Dept. of Minerals	104		*		HR[1]
Nevada Dept. of Minerals	113		*		HR

Local Government Name of Agency	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Malheur County Court	157	*			41
Owyhee County Commissioners	55		*		HR

Organizations and Businesses Name of Organization or Business	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Adirondack Council	5	*			35
Wilderness River Outfitters	15	*			35
Noranda Exploration	21	*		*	35
Idaho Consumer Affairs	52		*		HR
American Alpine Club	82	*			36
Idaho Outfitters & Guides Assoc.	91	*			37
National Public Lands Task Force	145	*			38
MAPCO Minerals Corp.	146	*		*	39
Idaho Alpine Club	152	*			39
American Wilderness Alliance	164	*			42
Natural Area Council	166	*			42
Mazamas	168	*			42
Sevy Guide Service	185	*			43
National Audubon Society	205	*		*	47
Southwestern Idaho Development Assoc.	207	*			47
Wildlife Management Institute	209	*		*	48
Berry Botanic Garden	222	*		*	48

[1] HR = Public Hearing Record

TABLE V-3 (continued)

Organizations and Businesses Name of Organization or Business	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Hughes River Expeditions	223	*			49
Northwest Environmental Defense Center	224	*			49
Earth First	225	*		*	50
Oregon Farm Bureau	236	*			50
Idaho Power Company	258	*		*	52
Sierra Club	284	*			55
Audubon Society	291	*		*	56
The Wildlife Society	295	*			57
Wilderness Society	302	*		*	60
Exxon Company USA	303	*		*	61
Golden Eagle Audubon Society	304	*			62
Gold Fields Mining Corp.	305	*		*	62
Committee for Idaho's High Desert	306	*		*	63
Panhandle Environmental League	307	*			66
Defenders of Wildlife	308	*		*	66
Francis Peak Gem & Mineral Society	309	*			67
Lane County Audubon Society	325	*			67
Idaho Conservation League	347	*		*	68
Sierra Pacific Power Co.	352	*		*	70
Kalmiopsis Action Alliance	353	*			71
Sierra Club	362	*			73
Oregon Natural Resources Council	364	*		*	74
Atlantic Richfield Co.	369	*	*	*	76
Oregon Natural Resources Council	371	*	*	*	78
Owyhee Cattlemens Assoc./Malheur County Cattlemens Assoc./Malheur County Court	2/0-2		*	*	103/84
Committee for Idaho's High Desert	4		*		
Oregon Cattlemens Assoc. (Jim Anderson)	6		*	*	105
Idaho Cattlemens Assoc.	14		*		
Idaho Environmental Council	16		*	*	107
American Assoc. of University Women	18		*	*	107
Idaho Gem Club	19		*		HR[1]
Idaho Cattlemen's Assoc.	20		*		HR
Ada County Fish & Game League	22		*		HR
Idaho Sportsmen's Coalition (Ted Weigold)	25		*	*	108
Idaho Trail Machine Assoc.	26		*		HR
Idaho Wildlife Federation	28		*		HR
Committee for Idaho's High Desert	30		*	*	110

[1] HR = Public Hearing Record.

TABLE V-3 (continued)

Organizations and Businesses Name of Organization or Business	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Idaho Farm Bureau Federation	31		*		HR[1]
Sagebrush Rebellion	35		*		HR
BSU Conservation Group	36		*		HR
Sierra Club	44		*	*	112
Northwest Federation of Mineralogical Society	49		*		HR
Sierra Club	51		*		HR
"45" Ranch	58		*		HR
Isaac Walton League	64		*		HR
Oregon Cattlemen's Assoc.	67		*		HR
Portland Audubon Society	71		*		HR
Oregon Natural Resources Council (Andy Kerr)	79		*	*	117
Committee for Idaho's High Desert (Bruce Boccard)	81		*	*	119
American Alpine Club	82		*		HR
Isaac Walton League	86		*		HR
Audubon Society (Linda Craig)	87		*	*	120
Sierra Club (Kelly Smith)	92		*		122
Oregon Whitewater Enthusiasts	93		*		HR
Native Plant Society of Oregon/ Botanic Gardens (Julie Kierstead)	94		*	*	123
Nevada Outdoor Recreation Assoc.	101		*		HR
Sierra Club (Roger Scholl)	102		*	*	126
Nevada Mining Assoc.	105		*		HR
Sierra Club (Rose Strickland)	107		*	*	126
Sierra Pacific Power Co.	109		*		HR
Sagebrush Rebellion, Inc.	114		*		HR
Sierra Club	115		*		HR
Independent Petroleum Assoc. of the Mountain States	118		*		HR
Wilderness Society	120		*		HR
Idaho Farm Bureau	121		*		HR
Northwest Federation of Mineralogical Societies	124		*		HR
Idaho Wildlife Federation	126		*		HR

[1] HR = Public Hearing Record.

TABLE V-3 (continued)

Individuals Name of Individual (only those requiring BLM response)	Comment No.	Written Comment	Oral Comment	BLM Response to Comments	Chpt. V Page Comment Printed
Frank Vaughn	156	*		*	40
Chad Gibson	174	*		*	43
Barry Anderson	196	*		*	44
Christopher Ives	199	*		*	45
Charles Inman	202	*		*	46
Harry Melts	242	*		*	51
Jeffrey Fereday	262	*		*	52
Pete Wyman	282	*		*	54
Peter Bowler	283	*		*	54
William Hoffman	287	*		*	55
Randall Morris	296	*		*	57
Charles Baker	330	*		*	67
Ted Weigold	337	*		*	68
Kent Coe	338	*		*	68
Joseph Hinton	351	*		*	70
Douglas Pineo	356	*		*	71
Steve Kramer	357	*		*	72
Craig Miller	358	*		*	73
John Frewing	365	*		*	74
Jennifer Holmes	367	*		*	75
John & Margi Timm	368	*		*	75
Robert Deering	373	*		*	78
David Herbst	375	*		*	79
Grant Baugh	1		*	*	103
Mike Hanley	2		*	*	103
Robert Skinner	5		*	*	104
Theodore Cowgill	7		*	*	106
Philip Heinrich	12		*	*	107
David Hawk	42		*	*	112
Randy Morris	62		*	*	113
Don Tryon	65		*	*	113
Jeff Crook	69		*	*	117
Bruce McCullough	80		*	*	118
John Frewing	97		*	*	124
Bill Bellinger	117		*	*	128

PUBLIC COMMENTS RECEIVED

The following section (pages V-35 through V-85) contains a reproduction of all written comments from government agencies (federal, state and local governments), elected officials, and from organizations (or businesses) which were received during the public comment period. Written comments from individuals are reproduced only if a written response from BLM is provided. Responses to the written comments begin on page V-86.

Oral comments from government agencies, elected officials, organizations and individuals are reproduced only if a written response from BLM is provided. Oral comments (oral testimony excerpts) and BLM responses begin on page V-103.

All written and oral comments on the draft EIS are on file at the Boise District Office.

The Adirondack Council
P.O.Box D-2
Elizabethtown, New York 12932
Phone: (518)873-2240

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March 1, 1984

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Clarence A. Petty
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Paul Schaefer
Gene Setzer
David Sive

Martin J. Zimmer, District Manager
Bureau of Land Management, USDI
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Joe:

Anita and I have just finished reviewing your recently released draft EIS for the proposed Owyhee Canyonlands Wilderness. It is a fine, professional document that you and your staff should be proud of.

Although we would have preferred the all wilderness alternative, we support your selection of the "all manageable wilderness" alternative as your proposed action. This compromise would seem to go a long way toward meeting the legitimate concerns of the stockmen while not seriously affecting the best of the wilderness resource. The designation of the 1200 acres of canyonlands outside the proposed wilderness as an area of critical environmental concern (ACEC) is crucial to this compromise, however.

We are particularly pleased that BLM has recognized the importance of diversity as a wilderness classification criterion - you are, professionally, ahead of the Forest Service on this.

We both send you and your family our best wishes. We are delighted with our new job and location but we do miss our Idaho friends!

Best regards,

George D. Davis

Wilderness River Outfitters
And Trail Expeditions, Inc.
P. O. BOX 871 PHONE (208) 756-3954
SALMON, IDAHO 83467

March 15, 1984

15

Boise District
Bureau of Land Management
3948 Development Ave.
Boise, Idaho 83705

Dear Folks;

After reviewing the draft EIS for the Owyhee Canyonland, I find your proposal is well thought out. However, my own opinion is to support the All Wilderness proposal of 436,047 acres wilderness designation for the Owyhee Area.

The main reason is that I feel the high quality of the area should receive the maximum acerage protection from development. While this may seem uncompromising for the immediate present, the long-term outlook might show our land preservation system was too late being implemented and not enough undeveloped land will be available for public use.

Sincerely

Joe Tonsmeire

Member Organizations: The Association for the Protection of the Adirondacks; National Audubon Society; The Natural Resources Defense Council; The Wilderness Society

P. O. Box 219 Owyhee, Nevada 89832 (702) 757-3161

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March 6, 1984

U.S. Department of the Interior
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Attn: Ted Milesnick

Dear Mr. Milesnick:

This is in reference to the Draft E.I.S. for the proposed wilderness designation of the Owyhee Canyonlands.

In reviewing our copy of the Draft we became concerned about the statement on Page IV-19. Item D at the top of the page under the title of Water states, "Although there are no current active proposals for dams on the Owyhee River. changing conditions could make previous proposals or new projects feasible. Each of the four wilderness alternatives would prohibit the construction of dams to store water for downstream irrigation use or for use within the Duck Valley Indian Reservation".

The first statement is not true if it includes the Owyhee River upstream from the proposed designation area. The Shoshone-Paiute Tribes have an existing proposed dam site on the Duck Valley Reservation. .01

To prohibit the construction of Skull Creek Dam would eliminate the chances of any further agricultural development on the Duck Valley Reservaion. The second paragraph would be true if declaration of the Owyhee Canyonland as wilderness prohibits upstream dam construction.

We wish to have clarifications made regarding our concerns above so that we may be able to comment on the EIS properly.

Also. in the future. we would like to be placed on the list of organizations to be solicited for comments.

Sincerely.

James Paiva
Tribal Chairman

HCAtkins:ss

Noranda Exploration, Inc.
2436 West Central Avenue
Missoula, Montana 59801
noranda
Tel.: (406) 728-0950

21

March 14, 1984

Martin J. Zimmer
District Manager - Boise District
Bureau of Land Management
3948 Development Ave.
Boise, Idaho 83705

RE: Owyhee Canyonlands Wilderness Proposal

Dear Mr. Zimmer:

I write to voice my concern over the proposed wilderness status for a portion of the Owyhee Canyonlands. In the draft statement mineral potential (esp. gold and silver) is recognized for OR-3-195 and I would like to reemphasize this potential. Geochemical anomalies, apparently hosted in Miocene-age rhyolite, have been detected in this area and more work is required to determine what potential is present. Miocene rhyolite bodies in southeastern Oregon have been the target of abundant exploratory work in the past few years and will likely remain top exploration targets in the region for years to come. I recommend that areas underlain by rhyolite especially with known geochemical anomalies remain open to mineral exploration. Please delete portions of OR-3-195 from the Wilderness Proposal. Thank you. .01

Sincerely,

NORANDA EXPLORATION, INC.

Andrew B. Carstensen
Geologist

ABC/blm

U.S. Department of Transportation
Federal Aviation Administration

Northwest Mountain Region
Colorado, Idaho, Montana, Oregon, Utah, Washington, Wyoming

17900 Pacific Highway South
C-68966
Seattle, Washington 98168

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APR 2 1984

Mr. Martin J. Zimmer, District Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

We have reviewed your draft Owyhee Canyonlands Wilderness Environmental Impact Statement and do not foresee any impact on aviation or its activities.

Thank you for the opportunity to review your proposed action.

Sincerely,

for Kenneth Thomasson
Joseph W. Harrell
Policy and Planning Officer

FOUNDED 1902

THE AMERICAN ALPINE CLUB

113 EAST 90TH STREET · NEW YORK, N.Y. 10028 USA · 212 722-1628 · CABLE: ALPINECLUB

RECEIVED
APR 16 1984
Bureau of Land Management
Boise District

NICHOLAS A. DODGE, CHAIRMAN, CONSERVATION & USE COMMITTEE
4609 S. W. 29th PLACE
PORTLAND, OREGON 97201

April 12, 1984

William Leavell, State Director
Bureau of Land Management
P.O. Box 2965
Portland, Oregon 97208

82

Dear Mr. Leavell:

The American Alpine Club, Oregon Section, has been actively participating with the BLM in the wilderness studies. Members of the AAC are hikers and backpackers, as well as mountain climbers. We are interested in seeing that suitable desert lands also be included in the National Wilderness Preservation System.

The AAC has studied the Owyhee Canyonlands Wilderness EIS and has concluded that this area is the key to what should become a major wilderness area in the Canyonlands. It could link other high-quality wilderness lands into a vast, remote and spectacular wildlands. Because the Owyhee Canyonlands are critical to the assemblage of this major wilderness, the AAC is supporting the Conservationist's All-Wilderness Alternative, which includes 460,000 acres.

It is not enough to merely protect the canyons; wildlife move forth and back from the canyons to the sage-covered country above. Extensive land must be protected on the plateau. The wilderness boundaries should be enlarged to take in the 28,000-acre Upper Toppin Creek area (OR 3-195) in order to protect the entire ecosystem and its inhabitants.

It is not enough to designate the BLM lands only as wilderness; land trades and acquisition must occur to bring the package into one ownership, including the riverland owned by the State of Oregon.

We urge that as many roads as possible be closed in the new Owyhee Canyonlands Wilderness so as to minimize the effects of motorized vehicles on the land and wildlife, as well as to make management of the area more feasible.

VICTOR ATIYEH
GOVERNOR

Department of Transportation
PARKS AND RECREATION DIVISION
525 TRADE STREET SE., SALEM, OREGON 97310

April 4, 1984

58

Martin J. Zimmer
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

RE: Draft Owyhee Canyon Environmental Impact Statement

Dear Sir:

The Oregon State Parks and Recreation Division appreciates the opportunity to review and comment on the above draft EIS.

All of the wilderness alternatives are compatible with the Owyhee River State Scenic Waterway. We can not identify conflicts with wilderness designation and the present state scenic waterway management.

Sincerely,

Alan J. Cook, Manager
Planning and Grants

AJC:sqh
cc: John Lilly
1807C

---

82 page 2

The AAC sees the responsibility of the BLM to make a serious effort to include all lands which have wilderness potential in the wilderness system. There will be almost no negative economic impact created by wilderness designation of the areas supported by the Conservationist's All-Wilderness Alternative for the Owyhee, and there would be a positive economic impact for generations to come. We urge that the final EIS reflect a changed position by the BLM.

Sincerely,

Vera L. Dafoe
Vera L. Dafoe,
Conservation Committee

copy to:
Martin J. Zimmer

HUNTING FISHING SCENIC

Idaho Outfitters' & Guides' Association, Inc.

P. O. BOX 95 BOISE, IDAHO 83701

RESOLUTION CONCERNING OWYHEE CANYONLANDS

91

WHEREAS, the Owyhee River and its canyons is an outstanding area and is used for back country recreation and particularly the outfitting industry in Idaho:

THEREFORE. BE IT RESOLVED, the the Idaho Outfitters and Guides Association supports the Committee for Idaho's High Desert Wilderness proposal for 1.18 million acres of designated wilderness.

This resolution was passed unanimously by the members of the Idaho Outfitters and Guides Association on April 5, 1984.

Elwood Masoner by L.H.
Elwood Masoner, President

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
155 Cottage St NE , Salem, Oregon, 97310
Phone Number: 378-3732

98

PNRS STATE REVIEW

Project #: OR 840220-077-4 Return Date: APR 06 1984

ENVIRONMENTAL IMPACT REVIEW PROCEDURES

If you cannot respond by the above return date, please call to arrange an extension at least one week prior to the review date.

ENVIRONMENTAL IMPACT REVIEW
DRAFT STATEMENT

( ) This project has no significant environmental impact.

(X) The environmental impact is adequately described..

( ) We suggest that the following points be considered in the preparation of a Final Environmental Impact Statement.

( ) No comment.

Remarks

Comments will be made under seperate letter directly to BLM/Federal Gov

Agency Parks By H.A. Cook

PNRS 88

VICTOR ATIYEH
GOVERNOR

Executive Department

155 COTTAGE STREET NE., SALEM, OREGON 97310

April 10, 1984

97

Phillip Hamilton
Planning & Environmental Coord. Staff
Oregon State Office, BLM
Boise District Office, BLM
3948 Development Avenue
Boise, ID 83705

SUBJECT: Owyhee Canyonlands Wilderness
OR840228-077-4

Thank you for submitting your draft Environmental Impact Statement for State of Oregon review and comment.

Your draft was referred to the appropriate state agencies for review. The Department of Agriculture offered the enclosed comment. The Department of Fish and Wildlife and Divison of State Parks will be submitting comments directly. These comments should be address in preparation of the final Environmental Impact Statement.

We will expect to receive copies of the final statement as required by Council of Environmental Quality Guidelines.

Sincerely,

INTERGOVERNMENTAL RELATIONS DIVISION

Dolores Streeter
Clearinghouse Coordinator

DS:bm
Enclosures

OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM

STATE CLEARINGHOUSE

Intergovernmental Relations Division
155 Cottage St NE , Salem, Oregon, 97310
Phone Number: 378-3732

99

PNRS STATE REVIEW

Project #: Return Date:

ENVIRONMENTAL IMPACT REVIEW PROCEDURES

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ENVIRONMENTAL IMPACT REVIEW
DRAFT STATEMENT

( ) This project has no significant environmental impact.

( ) The environmental impact is adequately described.

(✓) We suggest that the following points be considered in the preparation of a Final Environmental Impact Statement.

( ) No comment.

Remarks

The Oregon Dept. of Agriculture is generally in favor of multiple use management for Oregon lands. The primary areas of concern focussed on within the Owyhee Canyonlands E.I.S. included:

-- The impact of wilderness designation on existing livestock grazing - use and management;
-- The impact of wilderness designation on water resources - use and development for livestock consumption;
-- The impact of wilderness designation on the local economy, especially as it relates to agriculture identified as the primary employer and providing 10% of total personal income.

It was noted in the E.I.S. that generally speaking there will be allowable increases in livestock grazing or at least maintained at the present level of use under all alternatives. Also that livestock use levels outside wilderness boundaries are not predicted to be affected by a wilderness designation.
In addition, according to the E.I.S., none of the alternatives would have a significant impact on the local economy nor is one alternative significantly more beneficial to the local economy than another.

If this is the case, we do not oppose wilderness designations within the Owyhee Canyonlands unless certain areas would become impossible for the stockman to continue managing their livestock in an efficient manner, especially as it relates to water and accessability.

Agency [illegible] By [illegible]

PNRS 88

CONTACT REPORT

CIRCULATE TO: Files COPIES TO:

CONTACT: Tony Smart BLM & Winnifred

TYPE: ☒ phone ☐ letter ☐ office visit ☐ field DATE: 4/9 TIME: 9AM

SUBJECT: Sth. Owyhee Canyonlands FILE:

Summary of Conversation:

840224-064-2 N/C **100**

840228-078-2 N/C

4/6 840228-077-4 EIS - will send response directly to the applicant

Comments/Additional Action Required:

Report Submitted by: Barbara Mott

GEN:00011
4/6/83

NATIONAL PUBLIC LANDS TASK FORCE
NEVADA OUTDOOR RECREATION ASSOCIATION, INC. **145**

April 17, 1984

Mr. Joe Zimmer
Boise District Manager
U.S. Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

P.O. Box 1245
Carson City, Nevada 89702
tel. # (702) 883-1169

Subject: Testimony for the Owyhee Canyonlands wilderness.

Gentlemen:

This organization was founded in 1958, with the basic purposes of seeking "wise stewardship" and meaningful multiple use of the Public Lands. "NORA" as we are known in Nevada, was the original advocate of the BLM Organic Act idea....and as such, we pioneered the idea of retention of the Public Lands in public ownership, as well as the requirement that wilderness and outstanding natural areas be identified and protected. We are a non-profit, Nevada chartered, tax-exempt organization under IRS 501-c-3 rules(since 1967)--and have approximately 400 members scattered over 17 states.

We are well acquianted with the magnificence of the Owyhee Plateau and its canyonlands. It is quite appropriate, based on our many visits to this area, to refer to it as the largest remaining contiguous primeval landscape in the western United States.

We are therefore certain, based on many years of explorations and "riding circuit" on these lands, that wilderness status for a large portion--but, not all of it--would constitute an outstanding benefit to future generations. We think a lot of sweat, intimate involvement and fair consideration of valid existing grazing/mining rights has gone into the multiple-use basis for designation of wilderness study areas(WSAs) here.

What kind of resources are we talking about in this proceeding? Nowhere, except in the Grand Canyon itself, is there anything that compares with this canyon system spectacle. Yet, even a comparison to the Grand Canyon is misleading. It is like trying to compare apples with oranges. The Owyhee is in a class all by itself* Here are found vertical-walled gorges that first evoked disbelief when portrayed in early artist's renditions. We have never seen such canyons--anywhere. It boggles the mind to see how nature could have fashioned such chasms as these. Yet, this is not all the area offers. As a wildlife habitat it is quite unparalled--given its potential of becoming the only place in America where wild bighorns can actually have the space to expand. Even now, it is biggest bighorn habitat area in the Columbia Basin. Its predatory bird raptor potential is still unknown, but is undoubtedly considerable.

In Nevada, we have just completed hearings on the Black Rock Desert....and area we thought was "big" because it overlapped three counties. The Owyhee dwarfs even this, given the fact that it comprises a unit of 1.2 million acres and overlaps three states!

(continued)

* the uniqueness lies in canyon's volcanics

Owyhee Canyonlands testimony/page two **145**

In Nevada's portion, NORA has over many years--inventoried in the old Index & Survey two major extensions of this volcanic wildland. Both are utterly fantastic in their own right. We refer to the Little Humboldt and the South Fork-Owyhee Rivers. We know from long experience in this remote region of Elko County, that these Owyhee extensions into Nevada have vital raptor sites, possibly the only known otter occurrence in Nevada, undisturbed antelope grasslands and stunning dark chasms. Both canyon systems are in themselves remarkable wilderness for Nevada and a vital link to the Owyhee as a whole. Both the Little Owyhee and the South Fork possess fragile watersheds--whose long term condition will affect the downstream connections both in Idaho and Oregon. They are critical to water quality for the entire system.

Overall, these canyonlands and undulating plateau-grasslands are without any doubt--of great national significance. This is true as examples of perpendicular walled basaltic and rhyolitic canyons, high untrammeled plateaus and upland juniper forest habitat.

Concerning future BLM actions, this organization supports the concept of a 1.2 million acre wilderness for the tri-state canyonlands system. In Idaho, we urge adoption of the 460,000-acre wilderness alternative contained in the Owyhee Canyonlands EIS. We urge, in the case of the Oregon portion, that Federal ownership be restored via land exchange for vital sections of canyon rim and approaches. This is critical bighorn habitat for an animal that is sensitive to intrusions. This must be included into the final wilderness designation.

In addition, we ask that 28,000 acres in the southeast portion of the Owyhee Canyon WSA(OR 3-195) in Oregon be reconsidered for wilderness. This will also protect vital antelope kidding areas, bighorn habitat and raptors--plus other supplementary scenic and unique canyon values.

In Nevada, the integrity of the overall wilderness resource must be keyed to linking what has been two units on the South Fork. We are strenuously opposed to elimination of 8,350 acres on the South Fork on the basis of a tiny 140 acre inholding and 100 yards of "way" into the canyon. We have seen and visited this area and judge the entire canyon downriver from the Petan Ranch to be exceptional. We urge that this small 140 acre inholding be acquired and recognition be made of fact that access to the river is adequate from farther up-river. The same is true for a pipeline across the South Fork near the Idaho-Nevada line. May we point out there is a precedent for allowing this man-made feature. We cite the inclusion of two medium-sized power dams well inside the Desolation Wilderness near Lake Tahoe, California.

FLPMA Section 603 requires that viable wilderness be recognized with a minimum of political distractions. In fact, the law mandates the BLM to act based on the character of the resource. The two units in Nevada--the Little Owyhee River and the South Fork/Owyhee River--remains essentially wild and primeval. We believe potential exists not only under FLPMA Section 603, but that there are parcels deserving of ACEC identification. Failure to do so violates FLPMA Sections 102(a) and 201(a).

In FLPMA, Congress insisted on "wise stewardship" of the lands. Certain vested interests think the law should be disregarded. They say "no" to any wilderness--or, would emasculate it to the point where it becomes meaningless. We would point out to the BLM that the California U.S. Court recently threw out the entire RARE-II effort by the U.S. Forest Service because of failure to consider input and the character of the resource.

(continued)

Owyhee Canyonlands testimony/page three **145**

The debate is over as to whether the BLM can or cannot have a wilderness system. Congress settled the issue when they enacted FLPMA in 1976. This landmark Act caused the BLM to enter a new phase in its history. Congress fully intended--and indeed made the law's language stipulate--that BLM Public Land wilderness is a form of multiple use. It also signifies that, agency wide, only 7-8% of its lands is being given protection from development. The 1.2 million acre proposal is reasonable. It represents only half of what was "defacto roadless" at the beginning of the BLM's post-FLPMA inventory. We urge its overall adoption.

Respectfully submitted,

Charlie Watson

Charles S. Watson, Jr.
Director

MAPCO MINERALS CORPORATION
DELAMAR SILVER MINE
A SUBSIDIARY OF MAPCO INC

Lyle W. Talbott
VICE PRESIDENT
MINING

April 23, 1984

Mr. Martin J. Zimmer, District Manager
Bureau of Land Management
Boise District
3948 Development Avenue
Boise, ID 83705

146

Dear Joe:

This is my written response to the Draft, Environmental Impact Statement for the Owyhee Canyonlands Wilderness.

First, I support the "Sixth Alternative" as submitted by The Owyhee Cattlemen's Association in their Response to Owyhee Canyonland Wilderness EIS Draft. That is a Wild and Scenic River Designation for the river and multiple use for the adjacent plateaus.

Having run the river and having served on the Owyhee River Advisory Group, I am convinced that the river is too valuable a resource to not be managed to it's full potential. Further, a Wild and Scenic River classification will maximize it's potential for public good and enjoyment, short and long term while the proposed Canyonland Wilderness alternatives will only subordinate the river to other interests.

The plateau area has been under multiple use, namely grazing for some 125 years and is said, by the bureau, to still possess "Wilderness Characteristics." If this is the case why is any change in management of the plateaus necessary? Has someone lost sight of the purpose and objective of FLIPMA?

Secondly, I am deeply concerned about the withdrawal of the plateau from mineral entry. None of this area has been adequately prospected using the newly developed concepts of volcanic implacement of mineral values.

These concepts are based on the infusion of hot volcanic solutions into a shattered acidic host rock to deposit large low grade high tonnage ore bodies. Explorationists refer to this as the "hot springs" or "hot springs senter and reef" theory. .01

POST OFFICE BOX 52 JORDAN VALLEY OREGON 97910 (208) 583-2511

NEVADA MINING ASSOCIATION
One East First Street – P.O. Box 2498 – Reno, NV 89505
DeLamar Silver Mine
146
BULLETIN
PH: (702) 323-8575 Vol. 8 No. 1 Winter, 1983–1984 Robert E. Warren, Exec. Sec.

BLM reviews formula to evaluate Nevada mineral potential

mines or deposits for high potential

The Bureau of Land Management is re-thinking its formula for rating mineral potential in wilderness study areas - a formula which states an area cannot rank "high potential" for minerals unless it contains "known mines or deposits."

According to Robert Warren, executive secretary of the Nevada Mining Association, such an "unprofessional" formula is causing discovery sites such as important new gold mines by Amselco, FMC, Freeport and other Nevada gold-silver and base metal targets to be rated as having "low" of "medium" mineral potential.

"This is true, he said, "because there has been no past production or known mines at these sites. When BLM ranks an area low or medium potential, it becomes a higher priority target for lock-up as wilderness." (Claim staking and mining is not permitted in wilderness areas.) "Thus the minerals industry and the nation is deprived of production of mineral resources essential to the life style and economy of rural Nevada and the stability of the U.S. industrial base."

BLM consulting geologist Jean Juilland, of the Denver office, recently met with 10 of Nevada's ranking exploration firms and geologists, following complaints by Warren and Nevada geologists that BLM's mineral rating system is unprofessional and fails to recognize that many of the most significant deposits of precious and base minerals are being found in areas which lack evidence of known mines or mineral deposits.

"BLM's rating system is causing important mineralized targets in Nevada to be recommended for exclusive wilderness use by a trickle of in-state and out-of-state hikers," according to Warren.

Minerals . . .

Cont. from page 1

Freeport's exploration manager Allan Park stressed that the site of the now-famous Freeport gold mine in Elko County was considered a "dead area," without readily visible indicators of mineralization.

Geologists to alert BLM Policy makers

Reno geologist Peter Vickre, who heads up ASARCO's regional exploration program, pointed out the site of Arizona's major copper mines was once classified by the Federal geologists as "non-mineral in character."

Following the meeting, Mr. Juilland said he recognized the problem and would bring it to the attention of BLM policy makers.

Geologists at the meeting also stressed that mineral surveys of proposed wilderness areas by the U.S. Geologic Survey and U.S. Bureau of Mines often fail to recognize mineral potential. Many younger USGS geologists, they said, are not sufficiently skilled in exploration geology and are not aware of the most recent and sophisticated "models of potential mineralization." Thus they can walk right over "highly prospec-

Mr. Martin J. Zimmer
April 23, 1984
Page 2

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Examples of these newly recognized occurrances are major trends and mines:

Nevada: Carlin, Alligator Ridge, Hawthorne, Jerrit Canyon, and Gabbs.

California: Chocolate Mountain trend of the California Desert, McGlaughlan in the north of Napa County.

Idaho: The DeLamar district of Owyhee County. .01

The proposed wilderness of the canyon plateaus has many of the same characteristics of hot springs, senter and reefs in rhyolitic rocks with geologic structures. It is a logical extension of the Nevada and Idaho occurrances. Indeed the very precursory work done during the summer of 1982 by the Oregon Department of Geology and Minerals Industry sampled anomalous minerals values.

The recent recession and the continued depressed metal prices have precluded an industry exploration program of the extent required. This type of discovery is a result of long term painstaking exploration. Neither the USGS or Bureau of Mines are properly equipped or financed to conduct the thorough exploration this area deserves. I believe it is not in the best national interest to withdraw this land and that it's mineral and geothermal potential precludes it from wilderness characteristics. Attached is a page from the Winter '83-'84, Nevada Mining Association Bulletin which touches on these thoughts.

Secretary Clark has expressed his concern publicly as to the foreign dependancy of our nation on others for strategic minerals and metals. Certainly locking large acreages of untested and unexplored lands from such activities is not in the public interest.

Very truly yours,

Lyle W. Talbott
Vice President/Mining

LWT:eb
Enc.
xc: Senator Mark Hatfield
Senator Bob Packwood
Senator Steve Symms
Representative Larry Craig
Representative Bob Smith
Clark Whitlock, Idaho State Director, BLM
Wm. G. Leavell, Oregon " " "
Fearl Parker, Manager, Vale District "
Gary Cruthers, Ass't. Sect. Land & Water, Dept. of Interior
Thomas C. Nelson, American Mining Congress
Bob Anderson, Div. Chief, Mining Laws, BLM

IDAHO ALPINE CLUB
P.O. BOX 2885
IDAHO FALLS, IDAHO 83401

April 18, 1984

Mr. Joe Zimmer, District Manager
Bureau of Land Management-Boise District
3948 Development Avenue
Boise, ID 83705

152

Dear Sir:

Thank you for the copy of the draft Owyhee Canyonlands Wilderness EIS and for the opportunity to participate in decision making.

The Idaho Alpine Club includes many avid rafters and kayakers. A portion of our membership has paddled stretches of the Owyhee River on several occasions and returned quite impressed with the scenic and recreational qualities of this region. With wild river usage becoming popular to the point of congestion, protecting this outstanding river system from hydropower projects and other forms of development is absolutely essential. However, as with most outdoor-oriented organizations, the IAC holds wildlife in high regard and additionally favors preservation of the watershed's upland habitat.

We were fortunate in having Bruce Boccard of the Committee for Idaho's High Desert present slides and a discussion on the Owyhee Canyonlands for our March program. A thorough examination of the nearly two million roadless acres involved and of related boundary issues was included. CIHD's 1.2 million acre comprehensive Owyhee proposal seems practical, cost-effective, and recreationally wise, as well as providing maximum wildlife protection. In response, the IAC formally approved the CIHD proposal at our most recent council meeting.

Accordingly, in the context of this draft EIS, we support the 460,000-acre modified All-Wilderness Alternative. The IAC considers the BLM/State of Oregon land exchange to be the most attractive single feature of this alternative, since it addresses both banks of the Owyhee along the eastern edge of WSA OR-3-195. Moreover, we prefer CIHD's position against trimming the 28,000 acre Toppin Creek region, the south edge of Battle Creek/Deep Creek, and the Nevada WSA portions.

Please consider the IAC endorsement of 1.2 million acres for wilderness as applying to the related EISs yet to be issued. However, we would appreciate being placed on distribution for specific review and comment.

Thank you for your attention.

Scott Ploger James E. Fisher

Scott Ploger, Conservation Coord. James Fisher, Council President

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

156

April 26, 1984

Dear Sirs:

To consider eight, non-contiguous, WSAs as a single unit in your plan is contrary to the intent of the wilderness program.

Nor are eight individual WSAs in three different states needed to provide representation of Rhyolitic Canyonlands/Sagebrush-Bunchgrass Ecosystem in the National Wilderness Preservation System. This ecosystem/landform will not vanish from the face of the earth it it is not designated as a Wilderness area.

The DEIS stated several times that "Wilderness chacteristics would be maintained under the ACEC/HMA designations." This being true there is really no need for wilderness designation.

The DEIS also states that "with wilderness designation the ecological condition of native vegetation would improve." It also states under the No Action alternative "The ecological condition of the native plant community would improve with the implimentation of grazing sysyems." Therefore, wilderness designation is not needed to maintain the ecology of native vegetation.

The BLM is highly opposed to planting non-native grasses in the WSAs, yet they propose to ADD 1480 acres, a buffer zone no less, that has been seeded to crested wheatgrass to the proposed area. WHY? .01

The BLM seems to have lost sight of the fact that they are telling the President, Congress and the American people that they can manage any of the four wilderness alternatives in accordance with PL-88-577 and PL-94-579. This means that if Congress opts for the All Wilderness Alternative, the BLM will manage the areas, by those laws, without closing any roads, including cherry stem roads, and without acquiring inholdings or split-estate lands. If a Wilderness Alternative cannot be managed as set forth in the DEIS, then it should not be included. If it can be managed with cherry stem roads in one alternative it can be managed with cherry stem roads in any alternative.

Chapter II of the Wilderness Management Policy, issued September 1981, prohibits buffer zones and the closure of roads. Yet in the Owyhee Canyonlands Wilderness DEIS the BLM is proposing to do both. WHY? .02

In the DEIS the BLM came up with the phrase "EFFECTIVELY MANAGE." This phrase is not to be found in PL-88-577, PL-94-579 or in the Wilderness Management Policy. Section 603 of PL-94-579 states, "The Secretary shall continue to MANAGE such lands according to his authority under this act and other applicable laws in a manner so as not to impair the stability of such areas for preservation as wilderness." This law does not say effectively manage. It is the mandate of the people thru congress that all public lands be MANAGED for their intended use. To do otherwise is to MISMANAGE those lands.

Apparently the continued vehicular use of the 108.3 miles of ways in the 8 WSAs have not impaired their wilderness chacteristic.

If every cherry stem road impacted an area for one mile on either side of that road, a corridor 2 miles wide at each road, it would be less than 6% of the total area in the Proposed Action. Not very significant. If it is then WSA OR-3-195 (ID-16-485) should be eliminated as the impact of man is nearly 8%.

The DEIS states several times "vehicle traffic on cherry stem roads would continue to detract from solitude." Yet not once does it state that vehicle traffic for the whitewater users would detract solitude. These roads are as much of an intrusion as the cherry stem roads. WHY the difference in policy?

There are currently at least 7 road access put-in points for boaters. In all alternatives it is stated, "Existing motorized recreation access into the canyons for whitewater boating will be unaffected. WHY preference to the whitewater users? .03

The BLM has shown no concern for the elderly, handicapped or those with lesser physical ability, in being able to share part of the wilderness experience.

There are 38.25 miles of cherry stem roads in an arm, hand, finger like area approximately 95-miles long, north to south, from 1 to 10 miles wide; and approximately 50 miles long, east to west, from 2 to 6 miles wide. This area covers, within the WSAs, 436,047 acres. The 38.25 miles of cherry stem roads, if they average 20 feet wide, currently occupy 93 acres of those 436,047 WSA acres. The BLM would have you believe that the only opportunity for solitude is near the cherry stem roads.

It must be remembered that you can have your cake and eat it too, but there will be some crumbs scattered along the way (a cherry stem road here, a cherry stem road there.)

Under the No Action alternative the BLM did an over-kill with such phrases as, "Development of potential mineral resources,--- "energy and mineral exploration, discovery and development,--- "Potential mineral and energy development would seriously impair .04

the naturalness of the area." While at the same time they have stated "No mining claims are on record in any of the WSAs," and "The studies by TERRADATA indicate a generally low favorability for the accumulations of most mineral resources." .04

Since the BLM is considering the 8 WSAs as one unit they would have you believe that an action ar activity in one WSA would affect the naturalness of the other 7 WSAs.

Chapter III of the DEIS states, "Studies were done in the early 1970's to determine the feasibility of constructing dams on the Owyhee river,---"The studies, however indicate that the dams were not economically feasible,-- "There are currently no dams under active consideration, proposed or authorized." However in Chapter IV we find statements such as, "The posibility of dam construction remain a constant THREAT,-- "Canyonland habitats would continue to be THREATENED by possible dam construction." It appears that the BLM is using the words THREAT and THREATENED in trying to influence designation. .05

Section 603 of FLPMA states, "Once an area has been designated for preservation as wilderness, the provisions of the Wilderness Act which apply to natural forest wilderness areas shall apply with respect to the administration and use of such designated area." Section 4 of the Wilderness Act states, "within wilderness areas in the national forests designated by this act, (1) the President may within a specific area and in accordance with such regulations as he may deem desirable, authorize prospecting for water resources, the establishment and maintenance of reservoirs, water-conservation works, power projects, transmission lines and other facilities needed in the public interest, including the road construction and maintenance essential to development and use thereof." This action does not need the approval of congress, therefore Wilderness Designation does not guarantee that a wilderness area is immuned from dam construction, the resulting reservoirs or transmission line corridors. .06

The DEIS states "The Owyhee river Recreation Area Management Plan establishes recreation visitor carrying capacities and visitor information programs aimed at minimizing human disturbance (trampling) of plant communities." The only recreation visitor carrying capicity shown in the DEIS is for whitewater boating.

The predicted recreational visitor annual user days by the year 2002 is 15,400. The predicted livestock AMU's in the most restrictive alternative is 269,281 AMU's, by year 2002, this translates into 8,078,430 livestock use days annually, over 524 times more than the recreation visitor. Do these livestock trample any of the sensitive, threatened and endangered species? .07

With 7 access put-in points for boaters the BLM has not shown how they arrived at just 6 starts per day as the carrying capacity of the river. Based on the river milage within the WSAs this would space each party about 30 miles apart. Not very good utilization of the resource. The system can handle more users than that. Why wasn't the carrying capacity for hunters and backpacking/other shown? .08

The DEIS states, "Long-term increases in use are not expected to be greater than those already being generated." The 6 years between 1974 and 1980, boating increased 300%, yet the DEIS shows approximately a 140% to the year 2002. Not in line with the 1974 to 1980 trend. Why? .09

The economic picture seems to be a bureaucratic approach, where employment change, overall, increases 9% to 11% more than income. The picture in livestock is not painted as bleak as in recreation. Employment in livestock is only 1% or 2% above income, thru the 5 alternatives, while in recreation employment will increase from 24% to 34% more than income.

I don't know how any of them can stay in business.

Chapter II of the DEIS states, "A natural landscape is essential for primative recreation and solitude opportunities." Another statement trying to influence wilderness designation. It may be essential to meet the naturalness called for to designate a wilderness area, but it is not essential for primative recreation and solitude opportunities. .10

While the 8 WSAs encompass only 681 square miles, in the DEIS under solitude opportunities, these statements are made, " The outstanding opportunities for solitude in each WSA are attributed to the viewing of hundreds to THOUSANDS of square miles of vast, open seemingly undisturbed desert plateau lands and dist.-mountain ranges, -- "From many high points on the plateaus, one can see hundreds to THOUSANDS of square miles of vast open spaces seemingly untouched by man, stretching eastward from the Steens Mountains in Oregon to Juniper Mountain in Idaho, and southward to the Bull Run Mountains of Nevada. These vast open spaces instill a sence of complete separation from civilization, -- "the outstanding opportunities for solitude are attributed to the viewing of hundreds to THOUSANDS of square miles of vast, open seemingly undisturbed desert plateau lands and distant mountain ranges." Since the average width of the 8 WSAs is between 3 and 4 miles, and these hundreds to thousands of west, open deserts and mountain ranges are from 25 to 50 miles are outside of the WSAs they would not be part of the designated wilderness experience. .11

Under primative recreation opportunities the DEIS states, "Hiking on the plateaus also provides an opportunity to experience vast, open spaces stretching into the distant horizon." The distant horizon is many miles outside of the WSAs and the experience is no better from within the WSAs than from outside.

Under scenic values, the DEIS states, "In the far distance, snow capped mountains can be seen stretching along the horizon." These far distant, snow capped mountains are many, many miles outside of the WSAs and do not need the Owyhee river canyons and adjacent plateaus designated as wilderness for their scenic beauty to continue to shine. .11

The foregoing statements by the BLM is more biased input to try to influence the WSAs for wilderness designation. They are trying to use thousands of square miles of vast beauty outside of the WSAs to justify that designation. If the WSAs can't make it on their own they shouldn't be proposed.

In the relationship of alternatives to the six goals of the National Environmental Policy Act (NEPA):

Goal No. 1: Does not mandate that the environment be maintained in its natural condition. The No Action Alternative would satisfy this goal.

Goal No. 2: All alternatives would not achieve this goal. Those alternatives that would close boundary, cherry stem and other roads deny access to the handicapped, most senior citizens and the non-atheletic. Without access for these groups there are no natural scenic values.

Goal No. 3: As stated in Chapter V, "The ability for long-term protective management is due to the fact that the areas are generally self-protecting because of rugged topographic relief, rocky soil conditions, and due to their isolation from major highways." Without wilderness designation, wilderness chacteristics WILL NOT necessarily be lost.

Goal No. 4: Under this goal, wilderness designation would not support diversity and variety of individual choice.

Goal No. 5: There is considerable differences among the alternatives in acheiving this goal. Those alternatives that close roads and ways will cause users to bunch-up and contest at most in-put points. This action will also deprive access to many would-be users. The handwriting is on-the-wall, as Chapter III states, "Outstanding opportunities for solitude can be maintained by simply controlling the rate of visitor entry into the canyons." First will be permits and quotas. Then comes the controlled rate of travel. Move-it-out so the next group can get in.

Goal No. 6: The DEIS states, "None of the alternatives would affect the recycling of depletable resources." Wilderness designation would preclude the development and use of some mineral resources, therefore they would be unavailable for recycling. Some renewable resources that could better serve all multiple-use resources would be precluded under wilderness designation. In some cases crested wheatgrass or other vegetation could serve this purpose but would be prohibited because they are non-native. Yet the BLM seems not to object to non-native animals in the areas. The chukar. How many recreation users could identify a non-native plant, as such, if they saw one?

The BLM failed to mention the fact, especially in WSA OR-3-195, that several miles of the Owyhee river are outside of the WSA boundaries. Between 1 and 2 meander miles are outside of the WSA near the center of T.32S.,R.43E. About 3/4 meander mile near the center of T.34S.,R.45E. Between 4 and 5 meander miles are outside of the WSA in sections 3,9,10 and 16 in T.35S.,R.45E.; and at the confluence of the Owyhee river and the West Little Owyhee river are about 2 meander miles outside of the WSA boundary.

Besides the approximate 10 miles mentioned above, there are between 10 and 15 meander miles of river that cross thru state or private inholdings, areas of split-estate and between the WSA boundaries. .12

As several of these miles are thru private property and outside of the WSAs they could become a management problem, especially for continuous white water float trips.

The Adjustment Rationale, Table V-4, Manageability Adjustments for WSAs, in part is contrary to PL-94-579 and Wilderness Management Policy. The areas proposed for addition that are outside of the WSAs do not meet the wilderness criteria for size, and under any other name they are still buffer zones, which are prohibited. .13

The BLM would have you believe that by adjusting the WSA boundaries to conclde with legal subdivision lines the areas would be a more manageable configuration. In most all cases in this area this is not true as over 99.9% of these legal subdivision lines are neither marked or identifiable on the ground. And it is a safe bet that by the year 2002 the BLM will not have had the money to have these lines surveyed and posted.

Under Multiple Use Benefits the DEIS states, "Wilderness designation of the WSAs is not necessary to secure long-term multiple resource benefits to other resource values." It must also be remembered that all multiple resource values, including wilderness values, is possible without wilderness designation.

It is impossible to support the Owyhee Canyonlands Wilderness concept when:

1: All eight WSAs are considered as one unit.
2: The plan has 4 wilderness alternatives and those alternatives do not comply with the laws and policy.
3: The proposed and other alternatives discriminates AGAINST America's handicapped, elderly and non-athletic citizens.
4: It uses scare tactic words or phrases to influence designation of wilderness areas.
5: It tries to use hundreds to thousands of square miles outside of the WSAs to influence wilderness designation.
6: It proposes actions in its plans that shows preference to the whitewater users over all other users combined.
7: It plans to close boundary and cherry stem roads which are all outside of the WSAs.
8: It plans to create buffer zones thru the addition of non-WSA lands.

If the WSAs cannot be managed within the boundaries as identified during the Intensive Inventory process then those areas should not be proposed for wilderness designation.

I request that the final EIS correct the above deficiencies and those proposals that do not comply with existing laws and policy.

Sincerely,

Frank Vaughn
936 N. 7th
Lakeview, Or.
97630

The County of Malheur

Office of the County Court
COURTHOUSE
[503] 473-3123

RECEIVED
Vale, District - BLM
APR 30 1984
P.O. BOX 130
VALE, OREGON 97918

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April 27, 1984

Senator Bob Packwood
141 Russell Senate Office Building
Washington, D. C. 20510

Re: Owyhee Canyon Lands Wilderness

Dear Bob;

The Malheur County Court has filed written testimony in the hearings on this issue but also decided to correspond with you.

We feel that the Owyhee Cattlemen's response to the Owyhee Canyon Land Wilderness EIS Draft is a valid one. We support the concept of a Wild and Scenic River classification for the entire Owyhee River.

A wilderness designation locks up an area so that only a few people can use it. We favor a multiple use concept over wilderness. We realize that this is not one of the alternatives that BLM considered. Their statement was this alternative did not meet the requirements of the law. If this is true then Congress is the only body that can initiate this concept. We hope that you will give it your full consideration.

Sincerely,

MALHEUR COUNTY COURT

E. M. Seuell
Malheur County Judge

cc: Lyle Talbott
Mike Hanley
BLM

Encl.

American Wilderness Alliance
~~4960 East Evans Avenue/Suite B/Denver, Colorado 80222/(303) 758-5018~~
Box 1772
Boise, Idaho 83701

April 26, 1984

Mr. Joseph Zimmer, Manager
Boise District, B.L.M.
3098 Development Ave.
Boise, Idaho 83705

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Dear Mr. Zimmer:

As the Idaho representative of the American Wilderness Alliance I wish to comment on the Owyhee Canyonlands Wilderness E.I.S. covering land in Idaho, Nevada and Oregon.

The American Wilderness Alliance supports the 1.2 million acre Owyhee Canyonlands Wilderness proposed by the Committee for Idaho's High Desert.

We also feel that besides establishing this wilderness that other factors be considered:

(1) The B.L.M. should close many of the dirt "passageways" established by jeeps and other vehicles that encroach upon wildlife habitat, bighorn sheep areas, and other values in the area covered by wilderness.

(2) There be an exchange with the state of Oregon for state lands along the Owyhee River for B.L.M. lands elsewhere in the state.

(3) WSA (OR-3-195) in Oregon be included in wilderness to protect bighorn sheep, antelope, and other values; besides stopping mining in that vicinity.

(4) Include the 3,440 acre WSA (16-49A) besides 8,350 acres in Nevada's Owyhee Canyon WSA in wilderness.

Please record this in your hearing record.

Sincerely,
Paul Fritz

c.c. Idaho Congressional Delegation
Governor Evans

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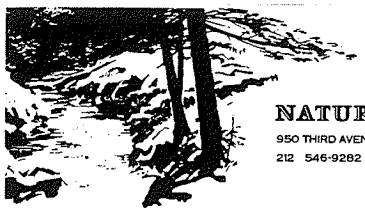
Conserve Wild America



NATURAL AREA COUNCIL
950 THIRD AVENUE, NEW YORK, N. Y. 10022
212 546-9282

166

RICHARD H. POUGH, *President*

April 26, 1984

Mr. Joe Zimmer
District Manager
Boise District BLM
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

The Owyhee Canyonlands and the surrounding country are without doubt some of America's most spectacular wilderness areas. They offer rare recreational experiences such as whitewater rafting and boating, hiking, hunting, fishing, backpacking and horseback riding. In addition they are the habitat of bighorn sheep, antelope, sage grouse, mule deer, mountain lions, river otter, mountain quail and several threatened and endangered plants.

I strongly support the 1.2 million-acre Owyhee Canyonlands Wilderness proposed by the Committee for Idaho's High Desert, which includes BLM's 460,000-acre All Wilderness Alternative, the 28,000 acres in Oregon (OR 3-195), the southern 3,440 acres in Idaho's Battle Creek-Deep Creek (16-49A), and the southern 8,350 acres of Nevada's Owyhee Canyon WSA. We are in need of BLM's continued wise management of our public lands.

Yours sincerely,

Richard H. Pough
President

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April 28, 1984

Mr Joe Zimmer, District Manager
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Re: Owyhee Canyonlands EIS

Dear Mr. Zimmer:

The Mazamas is an outdoor organization of 2800 members based in Portland, Oregon. We use the public lands for many of our activities, and white water rafting on the Owyhee River is one of our favorites. We also have extensive hiking and back packing programs which use this proposed Wilderness.

First and foremost, we appreciate that you are considering the several sub areas as one unit. This should allow for more uniform management. The several low class roads that separate the sub units are in general quite unobtrusive. We also appreciate that all alternatives except the no action alternative would keep dams off the river in the canyon section thereby preserving the wild river.

Our basic support is for the All Wilderness Alternative. We feel that some of the plateau areas should be included, in particular the 28,000 acres in the Toppin Creek Butte areas in the southern part of OR-3-195. This will provide good range for Antelope and Bighorn Sheep, and protect other wildlife values and remove the possibility of mining in the Wilderness.

We also urge that many roads, ways and cherrystem roads be closed to make the resultant Wildernesss more manageable. Some of them might be used by local ranchers for ranching purposes only by a permit system. Also a few roads need to remain open to the public (roads which divide sub areas) for access to the whitewater put-in points.

Please keep in mind that the Owyhee Canyonlands is part of a larger

Nine-O-Nine Northwest Nineteenth Avenue - Portland, Oregon 97209 - Telephone (503) 227-2345

MAZAMAS were organized on the summit of Mt. Hood in 1894 - The purposes of the club are to explore mountains, to disseminate authoritative and scientific information concerning them, and to encourage the preservation of forests and other features of mountain scenery in their natural beauty. Anyone who has climbed to the summit of a mountain on which there is a living glacier is eligible for membership. The word "Mazama" is derived from the name of a mountain goat.

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collection of Wilderness study areas in the Owyhee drainage. The Idaho High Desert Group's proposal for a 1.2 million acre Wilderness which includes this area deserves careful consideration and has our general support.

We appreciate this well written EIS Document and found it easy to understand.

Thank you for this opportunity to express our views.

Very truly yours,

F. J. Oberlander

F. J. Oberlander, Chairman
Mazamas Conservation Committee

po

174

Chad Gibson
Rt. 2, Box 119
Homedale, Id. 83628
April 30, 1984

TO: JOE ZIMMER

COMMENTS ON OWYHEE CANYONLANDS WINDERNESS EIS - February 1984

The outlined management for the proposed 374,160 acres does not support a finding of significant wilderness values. Closures of cherry stem roads and some boundary roads amounts to creation rather than protection of wilderness. Closures should not be necessary if a true wilderness existed in these areas. Allowing prescribed burning for range management and allowing big game (Mountain Sheep) research, trapping and transporting by helicopter also discredits the acutal existence of true wilderness. The proposed management would also allow scientific research and excavation of signigicant historic and prehistoric sites. Again, if the area had true wilderness characteristics the above management proposals would seem inappropriate.

Proposed livestock management calls for possible reductions in livestock numbers, restricting access for livestock management, and canceling range improvements for livestock grazing purposes. These proposals are primarily to support wildlife (Bighorn Sheep) populations. Since the Bighorn Sheep population has increased rapidly and to near maximum numbers under current management there should be no need for the proposed management to "protect" Bighorn Sheep populations.

It appears that designation of the 374,160 acres would only change an administrative wilderness area to a congressional wilderness area. The primary benefit of congressional wilderness designation as pointed out in the EIS would be the permanent protection of the canyonlands from dam construction and mineral exploration.

In view of this and the above proposed management is seem incredible that a No Wilderness - Scenic River alternative was not included in the EIS. The No Wilderness - No Action may be mandated by law, but the law also does not prohibit a No Wilderness - Some Action alternative. .01

The Owyhee and Scenic River designation would provide all of the protection necessary to prevent commercial development including utiiities, water impoundments, and mineral exploration. In addition the endangered species listed in the EIS would be protected.

The contention that the canyons and plateaus are integral parts of one ecosystem is true only where Bighorn Sheep are concerned. As stated above, the current population of Sheep and the rapid growth and expansion of the herd speaks for itself. Current multiple use management has porvided very adequately for the Sheep and there is no reason to believe the future would be any different.

I believe the Wild and Scenic River proposal is the only reasonable proposal to meet the needs of the WSA's covered by this EIS and all other WSA's in Owyhee County.

Sincerely,

Chad Gibson

Chad Gibson

United States Department of Agriculture — Soil Conservation Service

Room 345, 304 North 8th Street
Boise, Idaho 83702

May 3, 1984

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United States Department of Interior
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Sir:

Thank you for the opportunity to review the draft Owyhee Canyonlands Wilderness Environmental Impact Statement. We have no comments to make at this time.

Sincerely,

Stanley N. Hobson
State Conservationist

The Soil Conservation Service is an agency of the Department of Agriculture

United States Department of the Interior

BUREAU OF RECLAMATION
PACIFIC NORTHWEST REGION
FEDERAL BUILDING & U.S. COURTHOUSE
BOX 043-550 WEST FORT STREET
BOISE, IDAHO 83724

IN REPLY REFER TO: PN 150
121.

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MAY 02 1984

Memorandum

To: District Manager, Bureau of Land Management, Boise, Idaho

From: Assistant Regional Director, Bureau of Reclamation, Boise, Idaho

Subject: Review of Draft Environmental Impact Statement(DEIS)--Owyhee Canyonlands Wilderness, Bureau of Land Management, Idaho-Oregon

The subject DEIS has been reviewed by appropriate members of our staff, and we are providing the following comments for your use in preparing the final version of this document.

The proposed addition of the Owyhee Canyonlands to the National Wilderness Preservation System does not appear to affect the operation of our Owyhee Project. We feel, however, that the document should provide a better assessment of the effect of wilderness designation on future water resource development potential in the Owyhee River drainage. For the benefit of reviewers and eventual decisionmakers, the statement should provide a better understanding of the economic, social, and environmental aspects of the water resource development opportunities foregone. .01

Thank you for the opportunity to review this document.

John W. Keys, III

SEVY GUIDE SERVICE, INC.
Bob Sevy • P.O. Box 1527
Sun Valley, Idaho 83353
(208) 774-2200
(208) 788-3440

May 4, 1984

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United States Department of the Interior
Bureau of Land Management
ATTN: Mr. Martin J. Zimmer, District Manager
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Re: Owyhee Canyonlands Wilderness Environmental Impact Statement

Dear Mr. Zimmer:

I have reviewed the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement. In preparing my comments for your review, I have studied not only the B.L.M. prepared alternatives, but also the "Sixth Alternative" supported by the Owyhee Cattlemen's Association. I have also reviewed the proposals of the Committee for Idaho's High Desert. I am also aware that Senator Mark O. Hatfield of Oregon supports adding the Owyhee River (Oregon section) to the National Wild and Scenic Rivers System (Oregon Wilderness Bill, March 21, 1984). I have studied the opportunities of supporting National Wild and Scenic Rivers legislation for the Idaho section of the Upper Owyhee River by reviewing the Owyhee Wild and Scenic River Study--Final Report--dated March, 1979.

I have enjoyed a long-standing interest in the Upper Owyhee canyonlands and plateau. In 1974 we floated from the Duck Valley Indian Reservation to Three Forks; in 1976 we also explored the South Fork of the Owyhee River. Since these exploratory trips, I have outfitted and guided numerous float trips through these canyons. I have also visited or flown over much of the plateau country under consideration.

I served on the Owyhee River Advisory Panel that assisted in the development of the Owyhee River Interim Management Plan. I am presently serving as an appointee of the Secretary of the Interior on the B.L.M. Vale District Advisory Council and am therefore somewhat familiar with the opportunities of livestock grazing of this region as well as its other opportunities.

I believe that it is particularly important to recognize the uniqueness of the area under consideration. Many desert river canyons such as the Hells Canyon of the Snake River, the Lower Salmon River, and others certainly have a scenic grandeur; however, in my opinion, the Upper Owyhee canyonlands are the most beautiful that I have ever visited. There are few places in our country, including our Alaskan

Wilderness heritage, that are as wild. Your study expressly defines that the rhyolite canyonlands/sagebrush-bunchgrass eco-system is currently not represented in the National Wilderness Reservation System. I firmly believe that examples of this unique eco-system should be recognized as wilderness. There is no area of our country better qualified to be a part of our National Wilderness System than the Owyhee canyonlands, some of its tributary canyons, and some of the adjoining plateau area.

I am in support of a modified version of the B.L.M. Proposed Action. I do not support the All-Wilderness Alternative because I believe that some of the lands under consideration in this alternative may best be utilized as productive grazing lands and managed in the future for grazing improvements and allotments. In view of the opportunities of having not only a river wilderness, but also a plateau wilderness, in selected areas, I do not support the Canyonlands Alternative. I do, however, believe the National Wild and Scenic Rivers legislation is appropriate for both the Idaho and Oregon Upper Owyhee but that this legislation should not compromise the acreage of selected plateau wilderness lands that should be classified as wilderness.

The B.L.M. Proposed Action with some modifications is very attractive to me, and my support is as follows:

1. I strongly support that the free-floating condition of the Owyhee River as well as the South Fork of the Owyhee River be maintained. Congressional legislation should be enacted to include 192 miles of the Owyhee River from the Duck Valley Indian Reservation to the Owyhee Reservoir and the 60 miles of the South Fork of the Owyhee in the National Wild and Scenic River System. The Owyhee Wild and Scenic River Study (1079) as well as the B.L.M. Nationwide Rivers Inventory (which recommended the South Fork) recognized the outstanding river resources and wilderness values of these rivers.

As a river outfitter, I view the opportunity to conduct whitewater float trips on the Owyhee system as a most important asset to our company. The Upper Owyhee trips are unlike other trips that we offer in the fact that opportunities for wilderness isolation and solitude are magnified. On many of the trips that we offer such as the Middle Fork of the Salmon River, we encounter many other groups each day on the river. I would say that it has been seldom that we have had group encounters on the Upper Owyhee. For the client and outfitter who seek the quality of a true wilderness experience, the Upper Owyhee is a very rare opportunity. It is well to point out that the Owyhee River Recreation Area Management Plan (1983) identified the Upper Owyhee as a river where the float boat use would be limited and the Plan further promised the type of high quality trip experiences that we currently enjoy.

2. I support the management action that road access to the river would remain in a primitive condition. I think that upgrading of the road at Twelve Mile into the South Fork of the Owyhee and also the access to Crutchers Crossing should be considered. These roads are barely passable in their present condition. Primitive road access has served and should continue to serve as a natural population control for trips to the Upper Owyhee River.

3. I support, where necessary, a better pattern of livestock distribution and forage utilization to improve the condition of the native plant communities and to reduce soil erosion on the plateau as well as the riparian habitat of the canyonlands. Damaged areas of the riparian zone should soon be identified and livestock use of the area altered.

I believe that a balance is necessary in our resource management decisions to not only select rangeland best suited for livestock grazing allotments, but to also identify lands where native plant communities are enhanced. I reqlize that wilderness designation will limit the implementation of grazing allotments and improvements in the area. However, it is well to emphasize that even on plateau lands classified as wilderness, livestock grazing and wilderness values can be managed harmoniously. Many livestock operators view a wilderness classification as a locking up of resource values. I have been impressed that the livestock industry does have a representation of land managers who are sensitive and knowledgeable in their livestock grazing practices. These grazing permittees could compatibly utilize the native plant communities of plateau wilderness lands where watershed, wildlife, and recreation values are balanced. It should be also noted that in the B.L.M. Proposed Action that annual livestock use could increase in the long-run because of new project developments, vegetation treatments, and improved range conditions outside of the wilderness area boundaries.

Last fall, as a member of the Vale Advisory Council, I participated in a helicopter tour of wilderness study areas and livestock grazing allotments. I was very surprised to learn of the extent of rangeland allotments along the Owyhee Plateau. Future allotments and wild range fires will continue to alter the Owyhee landscape. In my own studies of ecology (Bachelor of Science Degree, College of Idaho; Red Deep Population Study at the University of Canterbury, Christchurch, New Zealand), I have usually supported land management practices that encourage a diversity of plant and animal communities to develop. A widespread and healthy plant diversification, particularly on fragile ecosystems such as some Upper Owyhee plateau lands, should be considered as the most appropriate management action for the area. The monoculture of crested wheatgrass may well be the most productive use of others' lands.

It is fair to note that studies have recognized the value of livestock grazing to wildlife populations. Under proper management, such as the timing of livestock use, some areas can product significant wildlife forage opportunities. In view of the fact that the Owyhee canyonlands

may soon support one of the largest desert bighorn sheep populations of the world, this opportunity as well as the hazard to overgrazing by both livestock and big game populations should be reviewed. Again let me emphasize that there is a place for both philosophies of range and wildlife management and that the B.L.M. Proposed Action comes close to recognizing these land and resource conflicts and opportunities.

I feel that there are lands within the B.L.M. Proposed Action that should be definitely classified as wilderness no matter what compromises are considered. These lands, in my opinion, represent the most unusual examples of the area's geology and plant communities. These Wilderness Study Areas of significant wilderness substance are as follows:

ID-16-52	Juniper Creek
ID-16-490	Yatahoney Creek
ID-111-49E	Battle Creek
ID-16-49A	Deep Creek

As I have previously stated, I support that additional canyonland wilderness should be designated on the Owyhee and South Fork of the Owyhee as classified National Wild and Scenic River lands.

I respectfully submit these comments.

Sincerely,

Bob Sevy

BS:rae

cc:

Senator James A. McClure
U.S. Senator from Idaho
Room 5229
Dirksen Building
Washington, D.C. 20510

Senator Steve Symms
U.S. Senator from Idaho
Dirksen Building
Washington, D.C. 20510

Representative Larry Craig
Congress of the United States
U.S. House of Representatives
515 Cannon House, Office B
Washington, D.C. 20515

Mr. Jerry Hughes
Hughes River Expeditions
River Outfitter
P. O. Box 217
Cambridge, Idaho 83610

The Honorable John Evans
Governor of the State of Idaho
Statehouse
Boise, Idaho 83720

Fearl M. Parker, District Manager
United States Department of the Interior
Bureau of Land Management
P. O. Box 700
Vale, Oregon 97918

196

TO:
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

FROM:
Barry F. Anderson
Portland State University
P. O. Box 751
Portland, OR 97207

COMMENTS on the OWYHEE CANYONLANDS WILDERNESS EIS

An EIS is a document that is intended to aid decision makers in selecting a course of action that is in the best interests of present and future publics. Two kinds of judgment are involved, explicitly or implicitly, in this and any decision making: fact judgments and value judgments. An EIS could be construed as a document in which technical experts present relevant fact judgments to decision makers, in which case the full responsibility for taking proper account of public values would fall on the decision makers. Alternatively, an EIS could be construed as a document in which a decision is made to recommend a course of action, in which case both (a) fact judgments made by technical experts and (b) value judgments made by elected, appointed, or sampled representatives of the public would, properly, be taken into account in the EIS.

The status of EIS's in general, as well as of this particular EIS, is not clear in this regard. Consequently, comments will be made from both points of view.

Projections of Environmental Impacts

From this point of view, the Owyhee Canyonlands Wilderness EIS appears to this reviewer to have been competently carried out.

Recommendation of a Proposed Course of Action

Recommendation of a proposed alternative is an act of decision making. As such, it is based, implicitly if not explicitly, on both fact and value judgments. In public policy decision making, both kinds of judgment and the procedures for arriving at these judgments should be made explicit. It is the belief of this reviewer that the information presented in this EIS is not adequate to support all of the fact and value judgments required for a responsible recommendation of a proposed course of action.

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Fact judgments. At least one kind of information, in addition to the information provided, is needed to support the fact judgments required for a responsible recommendation of a proposed course of action. This is information on the costs of management under each of the five alternatives. For example, the basis for selecting the All Manageable Wilderness alternative over the All Wilderness alternative appears to be costs of management, since the latter appears to be equal to or superior to the former in all other respects. Yet the reader is given no real basis for determining whether the difference in management costs is so great as to outweigh the difference in environmental benefits. .01

Value judgments. The statement that the All Manageable Wilderness alternative would result in a reduction of livestock use, in comparison with the No Wilderness/No Action alternative, from 300,971 AUM's to 280,652 AUM's is a fact judgment. However, some members of the public would attach a positive value to such a change, and others would attach a negative value to the same change. Similarly, the statement that the No Wilderness/No Action alternative would allow brush removal and the establishment of large energy or mineral projects (such as high voltage powerlines) on a larger scale than any of the other alternatives is a statement of fact. While no member of the public may attach positive aesthetic value to dead sagebrush plants and powerlines, the amount of negative value attached to these impacts may differ significantly from one member of the public to another.

Value judgments should be taken as seriously as fact judgments. A decision process, like a chain, is no stronger than its weakest link. To assure the soundest decision for the effort invested, effort should be distributed evenly throughout the process, rather than concentrated on either fact judgments or value judgments.

A well-developed technology exists for obtaining value judgments and applying them to decision alternatives (e.g., Anderson, 1981; Hobbes, 1979; Keeney & Raiffa, 1976; Sinden & Worrell, 1979). This technology involves standards and methods for identifying the affected publics, selecting representatives from these publics, identifying the value issues, and obtaining quantitative value judgments. Just as biological, geological, economic, and other expertise is brought to bear in projecting objective impacts, expertise in value measurement should be brought to bear in evaluating these impacts.

In summary, then, this reviewer believes that the EIS should either (a) refrain from recommending a proposed course of action, or (b) obtain as sound a basis for the value judgments involved as for the fact judgments. .02

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Keeney, R. L., & Raiffa, H. **Decisions with Multiple Objectives: Preferences and value trade-offs.** New York: Wiley, 1976.

Sinden, J. A., & Worrell, A. C. **Unpriced Values: Decisions without market prices.** New York: Wiley, 1979.

RECEIVED
MAY 11 1984
Bureau of Land Management
Boise District

May 7, 1984
1933 South Grant Apt. B
Springfield, Missouri
65807

199

Ted Milesnick, Team Leader
Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Milesnick:

Enclosed are comments on the Draft Environmental Impact Statement for the proposed Owyhee Canyonlands Wilderness area. The objective of these comments is to add to areas of the impact statement that lack depth and to question important issues in order to gain feedback from the Bureau of Land Management.

Sincerely,
Christopher J. Ives
Christopher J. Ives

Enclosure

199

COMMENTS ON "The Draft Environmental Impact Statements for the Proposed Wilderness Areas at Owyhee Canyonlands in Southeastern Oregon, Southwestern Idaho and Northcentral Nevada

1. Map 1

Map 1 needs the following improvements in order to justify inclusion within this EIS.
(1.) Scale
(2.) Accurate identification of highways
(3.) Different symbols for cities and mountains
(4.) Symbol or general outline for the Santa Rosa Range
(5.) Muth arrow
(6.) Symbol for Murphy

2. Pages iv and IV-23

There is mention that dams, mining, and other actions will significantly affect the area under consideration. What are some of the figures on the amount of land to be lost if a dam is constructed on the Owyhee River? If mining activities increase will the BLM follow through with proposals make in this DEIS? .01

3. Pages iii, iv and VI-2

Your general statement is that under the No Wilderness/No Action alternative no significant social or economic impact will be felt by the surrounding area. After consulting with the organizations listed on page VI-2 do you feel this statement still holds true? There is always some impact on the environment from those who will exploit whenever possible. .02

4. Page I-2

Under the title of D. Planning Issues and Concerns, second sentence, the usage of the word "it" at the start of the sentence makes the sentence hard to understand. Does "it" refer to the NIS or the Owyhee River WSAs?

5. Page I-6

Grazing should be considered for elimination from the Owyhee Canyonlands Wilderness area. In order to achieve a true wilderness area, elimination of man-related activities are in order. When considering the impact of over-grazing on this delicate ecosystem there should be no doubt that grazing should be removed. This issue is a major flaw in this EIS.
Discussion is needed to inform readers why elimination of grazing cannot be considered an alternative. Inclusion of this discussion should be added to the environmental consequences of the Final EIS. .03

6. Page I-6

The wording of the sentence under Management Concerns, number 2 is difficult to understand. Should number 2 be included with number 1? What is meant by the potential the land has to return to prelivestock grazing conditions? .04

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7. Page I-8 — When discussing whether the Owyhee River could be included under the Wild and Scenic Rivers Act you need to state the Act properly. The last sentence in F. Other Considerations, 1. Related EIS and Planning Recommendations should state as follows; Because we have no indication that the Owyhee River will be designated a wild river in the near future, the impact analysis for the Owyhee Canyonlands Wilderness EIS is based on what would occur without a Wild and Scenic River designation.

8. Page II-3 — Section e. 5) The definition for salting should be included in the glossary.

9. Page II-8 — When fences are constructed to prohibit cattle from entering the canyonlands there will be an impact on the scenic quality of the area. Not only will the actual sight of a man-made feature clutter the landscape but the psychological impact on those who view the fence from within the wilderness area will mar the wilderness experience. More discussion is needed on the influence of fences on the landscape. .05

10. Page II-9 — The first two paragraphs on this page discuss the details for restricting motorized vechiles on the 149,047 acres of the WSA land. The next paragraph turns around and opens the entire region for mineral and energy exploration and development. Serious consideration should be given to the impact of exploration on all 436,047 acres within the WSAs. Since mineral and energy pose the greatest threat to the wilderness area, more material should be devoted to whatever potential development exists for this area. .06

11. Page III-15 — Second sentence under E. Soils is hard to read. Suggested revision is as follows; First there are level to gently rolling plateaus with their associated sideslopes, and secondly there are canyons and stream channels.

12. Page III-20 — The BEA figures for personnal income and employment total 76% and 71% respectively. Your totals should be close to 100%, preferably exactly at 100%. One small table could be added to your text to present these figures more efficiently. .07

13. Page IV-8, line 24 — The sentence should read as follows; Since wildlife management agencies can continue bighorn sheep management practices under each alternative, California bighorn sheep will continue to grow and serve as a source for transplants to other areas which in turn will benefit the world population.

14. Page IV-8 — The first sentence under Wildlife Values states that wildlife populations and habitat would be maintained under all five alternatives. In the next paragraph at the bottom of the page in the third and fourth sentence you state that increased mineral development and human activity will disrupt wildlife populations. .08

2

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Continued
14. Page IV-8 — Coordination of phrases should be amended in order to increase the affectiveness of this section.

15. Page IV-11 — The definition or description of a chukar should be included in the glossary.

16. Pages IV-15 and IV-16 — These pages were not included in the Owyhee Canyonlands Wilderness Environmental Impact Statement I reviewed.

17. Page IV-22 — There is no background information on the input/output model used for the projections made on the five alternatives. Tables or basic information on the U.S. Forest Service IMPLAN system should be included in the appendix. .09

18. PageIV-23 — There is mention that there would be little impact on the local economy if the alternatives are implemented. With the exception of the cattle industry, where is the local economy located? The general location map lists Riddle, Grassmere, Silver City, DeLamar, Jordan Valley, Rome, and Marsing as possible towns near the study area. The EIS fails to mention these towns in any manner. One page could list these towns, their populations, economy, cultural activities, and how they would be affected by any one of the five alternatives. .10 .11

May 10, 1984

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RECEIVED
MAY 14 1984
Bureau of Land Management
Boise District

Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Att: Mr. Martin J. Zimmer, District Manager

Dear Sir:

Here are some comments of the draft Owyhee Canyonlands Wilderness EIS:

1. 43,765 acres should be added to the Managed Wilderness arount in WSA-3-195 (which are included in the amount in the All Wilderness proposal) because:

   a) They have important wilderness characteristics of solitude, native flora and fauna.

   b) On balance, they are more important as wilderness than as grazing lands. Note that the BLM figures show only an increase of grazing fees of $100,000 if used as intense grazing per year, instead of wilderness.

   c) They will provide needed additional food and cover for bighorn sheep, antelope and raptors.

   d) Will make the total wilderness area more managable.

2. In the proposed Managed Wilderness, improvements for livestock should be very limited.

   a) No tanks, pipelines or fences should be built unless they definitely enhance wilderness, such as removing cattle from stream banks, or to provide water for birds and wild animals.

   b) Any improvements for grazing should have a positive benefit/cost ratio to the government in dollars received. These are primarily wilderness areas, and cattle usage must be secondary.

3. Similarly, the burning off of vegetation or seeding should only be permitted where it is to kill off planted grasses and restore the land to its natural state. Any further manipulation of the cover would be contrary to wilderness management.

4. Personal Income figures on page III-20 for grazing returns and for recreation are not comparable as presented. Grazing AUMs are stated as $2.3 million if they are all used. Recreation, on the other hand, is given in current, not projected, use. Suggest: .01

   a) Project recreation usage to greatly increased usage say over 20 years, to arrive at user days.

   b) The expenditure per user day should include all costs, such as a proportion of camping gear, canoes, rafts, backpacks, rifles, lodging on way to and from the area, etc. .01

5. Wilderness boundaries should be extended back from the canyon rims wherever possible to provide better manageability, to included areas of important wilderness, and to provide better protection and forage for raptors and animals.

This is especially needed along the east bank of the south fork, in Townships 36 and 37 South. In many cases the boundary is actually far down the canyon slope.

The lands on this east bank belong to the state. It would appear that a land trade could be worked out to gain control of the relatively small land area needed, at no cost to the public.

Thank you for the opportunity to comment on this tremendously important project and for the thorough job that the Bureau has done in making this study. As a backpacker and otherwise "outdoor type" for more years than I care to contemplate, I'm concerned that we might not make the most of this last big opportunity to save a chunk of "America" for future generations.

Sincerely,

Charles H. Inman
814 Hillview Drive
Ashland, Oregon 97520

CC: Senator Packwood
Senator Hatfield
Congr. Weaver
Kelly Smith
Joe Knotts, Sierra Club (Rogue)

Arizona • Colorado • Idaho
Montana • Utah • Wyoming

205

National Audubon Society

ROCKY MOUNTAIN REGIONAL OFFICE
4150 DARLEY, SUITE 5, BOULDER, COLORADO 80303 (303) 499-0219

May 9, 1984

RECEIVED
MAY 14 1984
Bureau of Land Management
Boise District

Mr. Joe Zimmer
Boise District Manager
U.S. Bureau of Land Management
3948 Development Avenue
Boise, ID 83705

Dear Mr. Zimmer:

This letter constitutes the National Audubon Society's comments on the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement. We appreciate the opportunity to review the document and expect that this process will ultimately result in protection of the high desert wilderness of Idaho, Oregon and Nevada.

The draft EIS makes a strong case, not so much for the proposed alternative as for maximum protection of the spectacular scenic vistas, abundant wildlife and outstanding opportunities for solitude and primitive recreation, provided by the study area. The EIS cites:

- a high degree of naturalness (III-1)
- overall opportunities for solitude that are of exceptionally high quality (III-2-3).
- river running opportunities of exceptionally high quality and national significance (III-3).
- the opportunity for quality primitive recreation experiences lasting several days to a week or more in each WSA and up to several weeks in the WSA complex (III-4).
- "a dramatic stark beauty which totally envelopes the visitor" (III-5).
- vegetation in good ecological condition (III-6).
- a healthy bighorn sheep population (III-7).
- good populations of mule deer, mountain lion, pronghorn antelope, bobcat, river otter, and raptors (III-7-8).
- winter habitat for bald eagles (III-8).
- the presence of many petroglyphs (III-9).

In addition to these valuable resources, the DEIS enumerates very few substantial conflicts with wilderness. Only five grazing allotments contain 50% of lands in the WSAs: Ambrose Maker, 100%; Anderson #1401, 100%; Sheep Hills #0551, 54%; Crutcher Crossing #0593, 100%; "45" #0629, 47% (III-12-13). There are only 640 acres of private lands and 7,000 acres of State lands in the whole 453,707 acres (III-16). No mining claims are on record in any of the WSAs (III-17). There is some evidence of potential for uranium/thorium, coal, and oil and gas, but the two sets of evaluations of mineral potential (III-18-19) differ as to how favorable the indications are and how good the evidence is.

AMERICANS COMMITTED TO CONSERVATION

Regarding livestock grazing in particular, grazing could increase by approximately 43,500 AUMs even under the All Wilderness Alternative. However, the DEIS gives no information about projected demand for grazing; we cannot judge whether there is a need for any increase in AUMs, or for a 20,000-AUM increase, or for a 60,000-AUM increase. Without such information we find it very difficult to analyze the impacts of wilderness designation on livestock grazing. The Bureau should find it equally difficult! .01

Further, the DEIS fails to discuss the cost/benefit ratio of the improvements that would occur under each alternative. If large amounts of public monies would be poured into range projects with little return to the public, the wisest policy might be to forego such investments. In any case, economically unsound improvements cannot be allowed to take precedence over protection of soils, vegetation, wildlife, and watersheds. .02

Given these facts, the National Audubon Society believes BLM should proceed with Alternative 5, the All Wilderness Alternative, with a few minor adjustments. First, the existing ways and primitive roads in the WSAs should be closed and, if possible, re-seeded. This will facilitate wilderness management. (A point of clarification is needed: Why did Alternative 5, of all the alternatives, exclude road closures and land acquisition? Both are crucial to protecting wilderness values, especially wildlife habitat. The All-Wilderness Alternative is the most appropriate one to include these two items. Please explain why it was not designed that way). .03

Second, privately owned lands within the potential wilderness boundaries should be given high priority for acquisition, or if this is infeasible, methods of access compatible with wilderness designation of the WSAs should be worked out with the owners.

Third, three areas that are excluded from wilderness designation in the Preferred Alternative should very definitely be included, as they are in the All-Wilderness alternative. There are Toppin Creek, a 28,000 acre plateau area in the southeastern part of the Owyhee River Canyon WSA (OR 3-195) with high wildlife values; 3,440 acres in the Battle Creek-Deep Creek WSA (16-49A) with high values for watershed protection; and the southern 8,350 acres of NV-010-106, Nevada's Owyhee Canyon WSA. This last would help protect the bighorn sheep population; an access corridor to the private inholding could easily be included.

National Audubon, and specifically our members in Oregon and Idaho, would like to see more of the Owyhee country's high desert plateaus protected than are included in this draft EIS. Conservationists in the two States have proposed a 1.2 million acre wilderness that would include the upper drainages of Deep and Battle Creeks, the Little Owyhee River, and West Little Owyhee River as well as the interconnecting plateaus. We endorse this proposal and urge the Bureau to protect all these lands under its Interim Management provisions. This larger proposal would adequately protect the wildlife habitat, scenery, and outstanding primitive recreation

opportunities that the high desert country holds. The public deserves to have our valuable desert lands so preserved.

Thank you for your attention on this matter.

Sincerely,

Pauline D. Plaza
Pauline D. Plaza
Regional Representative

cc: Erwin Sonnenberg, President, Golden Eagle Audubon Society
Dan Worsham, President, Palouse Audubon Society
Joan Downing, President, Portneuf Valley Audubon Society
Jeff Ruprecht, President, Prairie Falcon Audubon Society
Charlie Stevenson, President, Snake River Audubon Society

SOUTHWESTERN IDAHO DEVELOPMENT ASSN.

P.O. Box 7322
Boise, Idaho 83707

May 11, 1984

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MAY 14 1984
Bureau of Land Management
Boise District

BOARD OF DIRECTORS

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Claire Wetherell
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Bureau of Land Management
3948 Development Way
Boise, Idaho

Gentlemen:

The board of directors of the Southwestern Idaho Development Association passed the following resolution which they would like entered into the record of testimony regarding the Owyhee Wilderness Area.

Whereas Idaho already has more wilderness area than any state other than Alaska and

Whereas the Owyhee area is not true wilderness, but has been used for multiple use for generations and

Whereas road closures are contemplated which violates the guidelines of wilderness designations and

Whereas the people of the area are opposed to such designation and would suffer adverse economic consequences by such designation;

Therefore, be it resolved that the board of directors of the Southwestern Idaho Development Association is opposed to the designation of any Owyhee wilderness area.

Very truly yours,

SOUTHWESTERN IDAHO DEVELOPMENT ASSN.

Don Brandt
Don Brandt, President

DB/ama

"working for the economic development of water, land, recreation, and business"

Wildlife Management Institute

Suite 725, 1101 14th Street, N.W., Washington, D.C. 20005 • 202/371-1808

DANIEL A. POOLE
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Board Chairman

May 9, 1984

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Bureau of Land Management
Boise District

Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

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Gentlemen:

The Wildlife Management Institute is pleased to comment on OWYHEE CANYONLANDS WILDERNESS ENVIRONMENTAL IMPACT STATEMENT, DRAFT, Oregon, Idaho and Nevada.

The Impact Statement and analysis are one of the best BLM wilderness studies we have examined. Comparing the total BLM lands available for range improvements and energy developments and the limited amount in WSA's, we are convinced that the best alternative is number 5, ALL WILDERNESS. That alternative protects a bigger area from development and thus reserves more land and management decision for future generations. It does not impact the economy. All grazing and other uses are predicted to increase with employment up 43 percent and income up 33 percent. This is only 4 percent lower in jobs and 5 percent lower in income than the Preferred Alternative (Page II-19). This is a small price to pay for more than 64,000 acres of additional wilderness protection in the All Wilderness alternative.

A better term than Wildlife-Wilderness Alternative is needed. One would suppose the alternative is one featuring wildlife. Not so. It is one reducing the area to only those lands presently and potentially occuppied by Big Horn sheep. A new title such as "Big Horn Sheep Only Wilderness Alternative" would be in order. .01

The trade off's are minimal; we urge the selection of the All Wilderness Alternative.

These remarks have been coordinated with William B. Morse, the Institute's Western Representative.

Sincerely,

Daniel A. Poole
President

DAP:msm

DEDICATED TO WILDLIFE SINCE 1911

THE BERRY BOTANIC GARDEN

May 16, 1984

222

Ted Milesnick, Team leader
Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, ID 83705

Dear Mr. Milesnick:

I am writing, as a professional botanist, to support the All Wilderness Alternative as the best alternative set forth in the Owyhee Canyonlands EIS of February 1984. However, I prefer the proposal by the Committee for Idaho's High Desert, which would include approximately 1.2 million acres in a comprehensive Owyhee Canyonlands Wilderness, because:

1) The entire Owyhee drainage is hardly known botanically. The list of threatened, endangered, and sensitive plant species known from the proposed wilderness area reflects this lack of knowledge--I am sure the list will lengthen dramatically when the area is botanized more thoroughly. Probable additions are detailed in this letter.

2) The Owyhee drainage is intrinsically valuable scientifically, because of the quality and diversity of its plant communities. Protection is especially important since the rhyolite canyonlands/sagebrush-bunchgrass ecosystem type is not represented in the national wilderness system.

.01

The Owyhee Uplands were bypassed by early botanical explorers, who avoided the obstacle presented by the Owyhee River canyon by taking a more northerly route, along the Snake River, or a southern route across northern Nevada. The area is still relatively inaccessible, and little is known about the distribution of its plant species (Cronquist et al., 1972). In addition to the eight threatened, endangered, or sensitive species listed on page V-3 of the EIS as occurring in the canyons of the WSAs, there are six other Federal candidate species which would probably be found within the Oregon portion of the proposed wilderness if there were a serious effort made to botanize the Owyhee. I have listed each below, followed by its Federal candidate status, its classification by the Oregon Natural Heritage Data Base, and some comment as to why the species is likely to occur in the proposed wilderness area.

Astragalus solitarius Peck (solitary milkvetch); Fed. category 2; Threatened throughout range. This species is known to occur at the Rome Cliffs, just to the north of WSA 3-195. Its range is "southern Harney & Malheur Counties in southeast Oregon and in adjacent Humboldt Co., Nevada...frequents the stiff clays of valley floors and mesas...between 1150 and 1450 meters." (Meinke, 1981)

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222

Collomia macrocalyx Leib. ex Brand. (bristle-flowered collomia); Fed. category 2; limited in abundance throughout range but currently stable. "Historically known from disjunct sites in Baker, Wheeler, Crook, Gilliam, Wasco, and southern Malheur Counties, Oregon... known from undisturbed, dry, open, rocky slopes and ridges at mid-elevations..." (Meinke, 1981)

Lepidium davisii Rollins (Davis' peppergrass); Fed. category 2; Threatened throughout range. "Central Malheur County...also known from scattered localities in several counties of southern Idaho... on hard, white, clayey playas with very few vegetative associates..." (Meinke, 1981)

Lomatium laevigatum (Nutt.) Coult. & Rose (smooth lomatium); Fed. category 2; Rare throughout range. The species was known from scattered localities in north-central, central, and southeast Oregon, as well as Washington, "in cracks of basalt cliffs and open, rocky slopes of the sagebrush steppe, at elevations ranging from 30 to 1200 meters." (Meinke, 1981)

Lupinus biddlei Hend. ex C.P. Smith (Biddle's lupine); Fed. category 2; Threatened throughout range. "...apparently endemic to southeast Oregon in southern Harney and Malheur Counties...occurs on low hillsides and flats, on dry open sites in moderately stoney soil at about 1350 to 1450 meters." Associated species include sagebrush, bluebunch wheatgrass, cheatgrass, and tailcup lupine (Meinke, 1981).

Rorippa columbiae (Robbins.) Howell (Columbia cress); Fed. category 2; Endangered throughout range. This species was recently rediscovered in Harney and Lake Counties, and historically is known also from southern Malheur County. Habitat is "moist areas in gravelly soil, generally along rivers, near springs, or in sites which are vernally wet, probably at lower to middle elevations. Surrounding vegetation is generally dominated by *Artemisia* species and various bunchgrasses." (Meinke, 1981)

The important things I would point out in regard to this list are 1) all these species are category 2 candidates; that is, they probably merit Federal listing as Endangered or Threatened, but more information is needed about their distribution and abundance and possible threats before those decisions can be made; 2) these are plants primarily of plateaus and slopes, rather than canyon walls and river bottoms; and 3) this is only a partial list of "probables", compiled for the Oregon part of the proposed Owyhee wilderness, as I am not familiar enough with plant distributions in Idaho and Nevada to predict which species occur there. It seems clear to me that the plant species list in the EIS, and the wilderness proposal itself, reflect a BLM bias against plateaus as being appropriate for wilderness, even though most of the really interesting plant species and communities are on the plateaus, and non-designation of wilderness will primarily affect plateau plants, through range improvement projects, increased grazing, mining, and vehicle traffic. I notice that the List of Principal Preparers of the EIS (pages P-1 and P-2) does not include a botanist.

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There have been several new species of plants named in the last decade from the Owyhee River drainage: *Artemisia packardiae* Grimes & Ertter (1979), *Hackelia ophiobia* Carr (1974), *Ivesia rhypara* Ertter & Reveal (1977), *Mentzelia packardiae* Glad (1976), and *Senecio ertterae* Barkley (1978). Most of these are from the Succor Creek/Leslie Gulch area, downriver from the proposed wilderness area, which has been studied intensively by Dr. Patricia Packard of the College of Idaho, and by several other botanists. There is every reason to expect more botanical surprises from the rest of the Owyhee.

In closing, I would like to recommend the widest possible protection of the Owyhee area. Specifically, I would like to see the Toppin Creek plateau and other small plateau areas included in the wilderness; and the closure of as many roads as possible.

References which are cited in this letter are:

Cronquist, Arthur, et al. 1972. *Intermountain Flora, Volume One.* New York Botanical Garden (Hafner Publ. Co.), New York.

Meinke, Robert J. 1981. *Threatened and Endangered Vascular Plants of Oregon: an Illustrated Guide.* U.S. Fish and Wildlife Service, Portland, Oregon.

Sincerely,

Julie Reinwand Kierstead
Director, Berry Botanic Garden
Seed Bank for Oregon Rare and
Endangered Plants

cc. Sen. Mark Hatfield
Sen. Bob Packwood
Don Tryon
William Leavell
Gordon Staker
Rhoda Love
Committee for Idaho's High Desert
Linda Craig
Andy Kerr

HUGHES
River Expeditions
P.O. Box 217
Cambridge, Idaho 83610
(208) 257-3477

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May 16, 1984

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, ID 83705

Dear Sir:

I have studied the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement, and I request that this letter become part of the public comment record regarding the issues involved in the EIS.

I am a professional outfitter & guide, and boating the Owyhee River is an important part of my outfitting and guiding business. We boat the entire Owyhee River System, and the trips we conduct on the Owyhee offer our clients a unique spring river trip opportunity. Also, the Owyhee trips offer an important employment opportunity for the guides who work with our outfitting service. Spring and early summer trips on the Owyhee River are a valuable opportunity for outfitters & guides to extend their season beyond the traditional summer boating season on other rivers.

In many ways, the Owyhee River is unique among the various Western rivers:

1. The Owyhee is one of the longest backcountry rivers in the West. No other river in the Northwest has so many miles of unspoiled river for boaters.

2. The Owyhee is a first rate white water trip with a unique style of white water problem. Rapids such as Owyhee Falls, Widowmaker, and The Cable are among the only Class VI rapids available in the West. The unique problems associated with these tremendous rapids makes for a boating experience which frequently means lining or portaging. These rapids and the other major rapids throughout the Owyhee Canyon from the Nevada Headwaters on both the East Fork and South Fork downstream to the Owyhee Reservoir are a great recreational resource for the many boaters across the U.S.

3. The upper and middle canyons of the Owyhee offer an opportunity for solitude which is truly unique among the various popular Western rivers. The combination of a spring season, volatile water sheds, and difficult road access help protect this solitude and are important factors in the superb quality of upper and middle Owyhee River experiences.

4. The physical characteristics of the riolite canyon country with its many beautifully eroded spires and faces makes for an unforgettable visual experience for all river travelers in the Owyhee Canyon.

5. The large Desert Bighorn Sheep herd in the Owyhee Canyon is a superb wildlife resource which deserves habitat protection.

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6. The desert character of the region along with the sagebrush-bunch grass econsystem of the Plateau make for a uniquely beautiful area.

I support the BLM's 'Proposed Action' (All Manageable Wilderness Alternative) which provides for 374,160 acres of BLM land to become the Owyhee Canyonlands Wilderness. I feel that this alternative makes the best compromise for uses of the area, and I think it protects what would become an important and unique wilderness area. I wish to make the following comments regarding the BLM's 'Proposed Action':

1. I strongly support protection for the Owyhee River and the South Fork of the Owyhee River from their Nevada Headwaters as free flowing rivers which are free of any new dams.

2. I support protection of the necessary habitat to support the continued growth of the Desert Bighorn Sheep herd in the region. I have enjoyed viewing these sheep on several occasions, and I consider them a valuable resource to the public.

3. I recognize that grazing is a valid and important use of wilderness lands and non-wilderness lands managed by the BLM. However, I support the careful management of livestock grazing in the All Manageable Wilderness Alternative area to protect the river banks from excessive erosion caused by livestock, to protect native grasses and plants, to protect the Bighorn Sheep habitat, and to protect historic and archaeological sites.

4. I support classification of the South Fork of the Owyhee and the Owyhee River as National Wild & Scenic Rivers.

5. Road access to the Canyon should be maintained in a rugged and somewhat primitive manner. The access problem is part of the reason the Owyhee's upper and middle canyons offer such a fine opportunity for solitude. However, road access should be maintained to some minimal level. One area of concern is the road into Crutchers Crossing which is becomming practically impassable and which needs some repairs and improvements.

6. I feel that the Owyhee River above Rome should be managed to offer a fine opportunity for solitude. I forsee the time when the BLM will have to follow other popular rivers lead, and institute a permit system for private boaters in addition to the existing permit system for outfitters & guides.

I compliment the Boise District for its management of the Idaho portion of the Owyhee so far as outfitter & guide permits are concerned. The number of permits has been limited in conjunction with the State of Idaho Outfitters & Guides Board outfitter licenses, and the system has worked well to provide a sensible and orderly outfitting business on these portions of the river.

I consider the number of outfitter permits on the Oregon portion of the river to be a serious management problem. The number needs to be reduced. Professional outfitters & guides have requested a moratorium on the number of permittees for years, yet the Vale District has chosen to leave the Oregon portion of the Owyhee open to limitless numbers of permittees.

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Since I first outfitted on the Owyhee in 1976, the number of permittees on the Oregon portion of the Owyhee has grown from 14 to over 60.

I recommend an immediate moratorium on any new outfitter permits on the Oregon portion of the Owyhee.

The Owyhee Canyon, Owyhee River, and a portion of the surrounding Owyhee Plateau deserve protection as wilderness. If this country isn't wilderness, there is no wilderness in the Western U.S. I feel the BLM's 'Proposed Action' alternative strikes the best over-all balance for the area between livestock, wildlife, conservation, and recreation interests. It is important to future generations that a representative portion of the Plateau's sagebrush-bunch grass ecosystem be preserved along with the Canyon and River. This area will make a fine, deserving, and truly unique addition to the nation's Wilderness system.

Sincerely,

Jerry Hughes
Hughes River Expeditions

cc: Joe Zimmer, District Manager
Boise District Office
BLM
3948 Development Ave.
Boise, ID 83705

Senator James A.McClure
U.S. Senator from Idaho
Rm. 5229
Dirksen Blding.
Washington D.C. 20510

Senator Steve Symms
U.S. Senator from Idaho
Dirksen Blding.
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Representative Larry Craig
Congress of the U.S.
House of Representatives
515 Cannon House, Office B
Washington D.C. 20515

The Honorable John Evans
Governor of the State of Idaho
Statehouse
Boise, ID 83720

Fearl M. Parker, District Manager
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Northwest Environmental Defense Center
10015 S.W. Terwilliger Blvd., Portland, Oregon 97219
(503) 244-1181 ext.707

DT: May. 16, 1984

TO: Bureau of Land Management

RE: Owyhee Canyonlands Environmental Impact Statement

NEDC is a litigation oriented non-profit corporation dedicated to responsible development and conservation of natural resources of the Pacific Northwest. This comment is in support of the Owyhee Canyonlands desert wilderness since this designation is in the best interest of the American public.

The proposed alternative in the EIS would allow a 20% increase in livestock grazing in this area. This is the product of special interest lobbying and not in the general public interest. This plateau bias is evidenced by the exclusion of the Toppin Creek area; 28,000 acres of unique Oregon desert uplands habitat. Economic subsidization of the cattle industry at the expense of the general public interest in preserving all unique land forms and fair competition is far outside the policy of the most good for the most people.

In addition, excessive grazing on the plateau will destroy the native bunchgrasses necessary to sustain the largest population of Bighorn sheep in the lower 48 states. Grazing changes the species composition such that sagebrush and cheatgrass dominate. This will surely lead to a decline in the population of this endangered specie.

Finally, the Owyhee Canyonlands contain several plant species classified as endangered or threatened. Prehitoric sites, such as Dirty Shame Rockshelter, would be lost to mining operations in the heart of 1.8 million acres of contiguous wilderness. This can be stopped only be keeping the entire area whole and consistently designated. All roads in the area should be closed while still in primitive and reclaimable form to fully restore the wilderness character of this area.

In conclusion, our organization would like to stress support of the "conservationist-modified all-wilderness"

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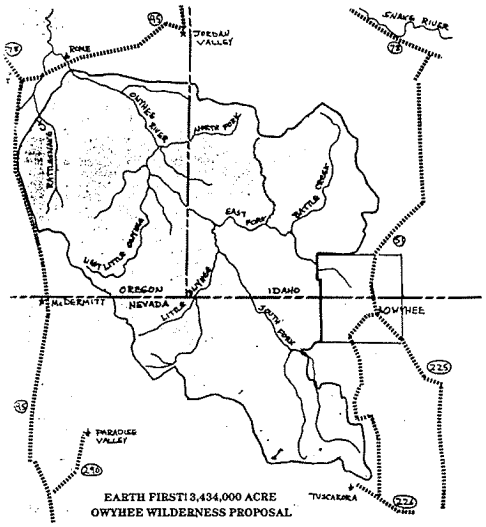
In conclusion, our organization would like to stress support for the "conservationist-modified all-wilderness" alternative as opposed to the "all manageable wilderness" alternative proposed by the BLM.

Respectfully submitted,

Craig Trueblood
Law Clerk - NEDC

cc ONRC

225



Earth First!

Mr. Joe Zimmer
District Manager
Bureau of Land Management
3948 Development Avenue
Boise, ID 83705

May 16, 1984

225

Dear Mr. Zimmer

Attached is a map outlining the Earth First! proposal for a 3,434,000 acre Owyhee Wilderness. The proposal includes 1,267,000 acres in Oregon, 1,176,000 acres in Idaho and 991,000 acres in Nevada. .01

Commercial livestock grazing should be phased out of the area as soon as possible. All range "improvement" structures should be torn down or allowed to deteriorate. All roads and other vehicle ways should be closed and reclaimed or allowed to deteriorate. The wolf and any other extirpated wildlife should be reintroduced to the area. .02

We feel that this is a most reasonable proposal and an outstanding opportunity to preserve a large area of wilderness for natural diversity and for human re-creation. There are no significant roads or other structures or activities shut down. Mineral resources are insignificant. The economic value of grazing in the area is inconsequential. Not only can the health of the land be restored by eliminating livestock grazing but a tremendous burden on the taxpayers can be eliminated as well by phasing out the highly subsidized commercial grazing in the area. If it is necessary to continue to support the former grazing permittees, then welfare checks should just be sent directly to them instead of engaging in the fantasy that they are engaged in positive economic enterprise and are not on the public dole.

The Owyhee is one of our best opportunities to recreate a large, diverse wilderness in this country. If the BLM has the courage and vision to honestly consider this proposal and work for its enactment, future generations will look back on the protection of the Owyhee as one of the finest things done by the United States government in the 1980's.

Sincerely

Dave Foreman
POB 235
Ely, Nevada 89301

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1730 Commercial St. S.E. • P.O. Box 2209 • Salem, OR 97308 • (503) 581-1466

the voice of organized agriculture

May 23, 1984

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Sir:

This letter represents the comment of the Malheur County Farm Bureau and the Oregon Farm Bureau Federation regarding the "Owyhee Canyonlands Wilderness Environmental Impact Statement Draft." Our organizations support the No Wilderness/No Action Alternative. We oppose the Proposed Action as well as any of the other offered alternatives. We are of the view that the ACEC/HMA designation for these acres would protect the grazing, resource, and recreational values of those lands inside WSA OR-3-195 without damage to the economic inputs which derive from resource utilization in that area. Further, we are of the view that certain characteristics of WSA OR-3-195 make it unsuited for wilderness even by BLM's amenity values criteria. For example, the 35 water developments in that unit are clearly works of man and are substantially noticeable.

By adopting the BLM's No Wilderness/No Action Alternative, Bighorn Sheep habitat is protected as well as other values by the ACEC/HMA designation. River-running and backpacking opportunities would be continued, thereby alleviating the increased pressure from those demands which would result to other areas by the All Wilderness designations. Since no roads would be closed to motorized vehicles, this kind of recreation would be enhanced. The economy would be best served by the alternative we support because mineral exploration and development could continue. Moreover, the economy would be well served by the No Wilderness/No Action Alternative due to the potential allowed to increase AUMs from 225,698 to 308,971 over the next 20 years. An important feature of the alternative we support is the improvement in the ecological condition of the native plant communities in the area. To quote your EIS Draft, "The ecological condition of native plant communities would improve with the implementation of grazing systems. . . Soil erosion would be reduced as vegetation cover improves on both native vegetation and on seeded areas." (Draft EIS, p.iv) Electric power supply would be enhanced by our alternative by permitting dam construction in a river basin with no anadromous fish runs to suffer damage by hydro-power turbines.

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In conclusion, please register our support for the No Wilderness/ No Action Alternative. By adopting this management plan, our economy will be well served, habitat and forage supplies improved, and grazing protected and enhanced.

Sincerely,

Jim Langley, President
Malheur County Farm Bureau
Route 2, Box 4703
Nyssa, Oregon 97913

Scott Ashcom, Manager
Natural and Environmental
Resource Division,
Oregon Farm Bureau Federation

JL/SA:mn

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lack the communication skills and despite its numerous numbers is very inddequately represented at public meetings. They seldom submit individual written comments.
B. The out doors planners and recreation specialists lack expertise in non-wilderness recreational field. Having personal contact with many BLM recreational staff members in the five states of Idaho, Arizona, Utah, Nevada and Oregon I have yet to find one who is an avid trail-biker, motocrosser, ORV activist etc. They have been all recruited from the ranks of pro-wilderness interest groups. I have found that their personal beliefs influence their planning to an unprofessional degree. They prepare pamphlets describing wilderness trips but rarely if ever any pamphlets covering recommended trailbiking routes. Upon personal contact in their offices they can suggest many wilderness hiking routes but are non-knowledgeable to recommend a scenic trailbiking route in scenic primitive setting. They are often hostile towards ORV rec./ What does that has to do with Owyhee Canyonlands DEIS?
This bias for an example has prevailed to specifieyng the locations of the roads and ways to be closed. How can one assess the impact of such closures if one does not know the locations? Nevada and Arizona notably in their DEIS include maps showing such proposed closure of existing roads and ways. This DEIS only gives a Summary Table as to total mileage of ways and roads to be closed in each WSA; but no information to these locations. .03
I conclude by urging you to take a more balanced approach and adopting the Canyonlands Wilderness Alternative which will preserve the inner canyon for the preservationist and the whitewater boater. The few sensitive locations can outside of it can be effectively managed by specifying ACES-s and HMA-s. There is too much land locked up already as wilderness. Most of the highest scenic values lands are being locked up exactly; your Proposed Action in your DEIS is accelerating that biased trend.

Sincerely, Harry Melts

Harry Melts
General Delivery
Porthill, Idaho 83853

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BLM
Owyhee Canyonlands EIS
3948 Development Ave.
Boise, ID 83705

18.05.84.

Comments on Owyhee Canyonlands DEIS

Support the CANYONLANDS WILDERNESS ALTERNATIVE

Rationale: Considering the vast acreage already classified as wilderness or under active consideration, specially in Idaho, the wilderness acreage proposed under this alternative is more than sufficient. The BLM is pushing the others notably the primitive and semi primitive motorized recreationist out from top scenic areas making them the sole property of relatively small number of individuals for a limited time of the year. The BLM's preferred alternative is going to close about 100 miles of roads and ways and over a hundred miles of two wheeled tracks and ways for a total of twohundred miles. The DEIS does not address to the issue where to is the EIS Team going to push me and the hundredsof others who currently use these 200 miles of roads and ways. .01

It is significant that the lands the BLM in their Proposed Action which are suggested nonsuitable are of lower scenic quality. All the highly scenic areas will be closed to the motorized recreationist.
In the past I have enjoyed traveling under semi primitive conditions to the rim of the canyon, all these will be closed (example the roadway from R48E; T37S into R47E; T36S). Why include these plateau lands in wilderness? I question how many wilderness recreationists are going to backpack on the featureless plateau?
Your EIS Team recommends that no rim access is allowed by specifying only four routes/roads and only to allow whitewater boating access. I question the validity of your Summary Table on page IV-13, which leads one to believe that no motorized recreation besides hunting takes place. No indication is given in this table or anywhere else how many primitive or semiprimitvie or non primitive motorized recreationists in form of user days will be pushed out from this extensive area. The whole DEIS has a decidedly pro-wilderness slant. .02

This makes one speculate the possible factors involved for such a bias. I believe the two major factors are:
A. BLM is influenced to an unduly degree by the more skillful, well organized lobbying forces of the pro-wilderness groups. They possess superior communications skills partly due being supported by the academics who favor the locking up of lands so they can use these for their pet research projects. The motorized recreationist comes more or less from the bluecollar working class, is mostly unorganized

VICTOR ATIYEH
GOVERNOR

Department of Fish and Wildlife
506 S.W. MILL STREET, P.O. BOX 3503, PORTLAND, OREGON 97208

May 21, 1984

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Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Dear Sirs:

The Oregon Department of Fish and Wildlife has reviewed the Owyhee Canyonlands Wilderness DEIS as submitted for public comment by the Bureau.

Our review and comment pertains only to the Oregon portion of the Owyhee Canyonlands identified as OR-3-195 in the Environmental Statement.

The Oregon Fish and Wildlife Commission expressed their concerns over the restrictions placed on wildlife management activities within BLM designated wilderness areas. As a result, the Commission adopted a motion in support of the Canyonlands Wilderness Alternative as discussed in the DEIS.

We appreciate the opportunity to comment on your agency's land management activities and look forward to participating in the upcoming Statewide Wilderness EIS later this year.

Sincerely,

John R. Donaldson, PhD
Director

JRD:sjw

SNAKE RIVER HYDRO POWER

IDAHO POWER COMPANY

BOX 70 • BOISE, IDAHO 83707

May 21, 1984

Mr. Martin Zimmer
District Manager
Boise District Office
Bureau of Land Management
3948 Development Avenue
Boise, ID 83705

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Dear Mr. Zimmer:

Idaho Power Company offers the following comments on the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement, prepared by the Bureau of Land Management, and dated February, 1984.

The Company strongly opposes the management recommendations for the Northwest Gas Pipeline utility corridor included under the proposed action in the Draft EIS. Limiting this corridor to underground use only would effectively prohibit its use for construction of needed electrical transmission facilities in the future.

The Company is not opposed to the wilderness concept, however, we are greatly concerned with the effects these wilderness recommendations will have on the existing utility corridor, which is otherwise suitable for the transmission of electrical energy necessary to meet the needs of potentially millions of the region's residents.

Idaho Power, and others in the utility industry, have provided on several occasions, information regarding the importance of a viable electrical transmission corridor through the canyonlands study area. The Bureau of Land Management appears to have largely ignored this input. Specifically:

1. Provision for a useable electrical transmission corridor was not considered a major land use issue, when in fact it is. At least two published documents from the utility industry and three letters from Idaho Power Company have been provided to the BLM on this subject over the past four years. One of these, the Western Regional Corridor Study, developed by utilities in cooperation with state and federal agencies, provides information regarding existing and future transportation and utility corridors for use in the planning process and wilderness considerations. Additionally, several meetings have been held with the BLM concerning this corridor. Input has also been provided to adjacent BLM districts in Nevada concerning the importance of the corridor for transmission of electrical energy.

2. Limiting the Northwest Pipeline corridor to underground use is not acceptable. The viability of the corridor for electrical purposes lies in the ability to transport large quantities of electrical energy within the region. It is likely that future needs for transmission of energy will require at least one high voltage

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transmission line in the study area. Further, the underground constraint placed on the existing corridor is not consistent with present technology. Failure to allow above ground electrical facilities along the designated corridor would result in increased economic costs due to construction of a transmission line in an alternate, and probably less desirable location, since construction of underground high voltage lines over long distances is simply not practicable. Thus, the DEIS proposed action effectively eliminates use of the existing corridor for the transmission of electric energy.

3. The limitation of the corridor width to 1/4 mile, presumably, 1/8 mile on either side of the pipeline, is not sufficient. Designated corridors should be a minimum of three (3) miles in width to allow flexibility to minimize visual impacts and avoid other site specific concerns, and provide sufficient room to accommodate future facilities.

.01

4. The Draft Environmental Impact Statement does not address the consequence of the defacto elimination of a viable electrical transmission corridor on energy production and transmission throughout the Western United States. Further, it is not clear that allowing above ground transmission lines within the corridor would result in unacceptable negative environmental impacts on existing natural resources. Designation of a corridor is not authorization for a right-of-way or construction. It is simply a planning tool which can be used by government and industry for the reasonable and timely utilization of the nation's resources.

In summary, Idaho Power opposes designation of a 1/4 mile wide Northwest Gas Pipeline utility corridor for underground use only. The company believes the DEIS to be deficient in its analysis of the impacts likely to result from the proposed action, as well as the alternative actions considered. It is recommended that the BLM reevaluate the issue of electrical transmission corridors, revise its DEIS to fully address this issue, and adopt a proposed action which provides for needed electrical transmission corridors through the study area. The Company, in concert with other utilities, plans to evaluate further the legal adequacies of the document, and pursue appropriate actions to assure that all deficiencies are addressed by the BLM in the final document.

Sincerely,

David W. Meyers
Manager
Environmental Affairs

DWM:lf

C: L E Lanham
A R Ansell

United States Department of the Interior

FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
4620 Overland Road, Room 209
Boise, Idaho 83705

259

May 24, 1984

TO: District Manager, Bureau of Land Management, Boise

FROM: Field Supervisor, FWS, Ecological Services, Boise

SUBJECT: Owyhee Canyonlands Wilderness, Draft Environmental Impact Statement

The Owyhee Canyonlands are an important desert wilderness area for wildlife as well as for scenic and recreational opportunities. We support the All Manageable Wilderness Alternative, but recommend that the southern 8,350 acres of Nevada's Owyhee Canyon ESA NV-010-106 be included in the Wilderness Proposal with provisions for a 100-foot wide road corridor to the private property along the river. This portion of the South Fork Owyhee River is valuable habitat for migratory waterfowl, raptors, and bighorn sheep. The canyonland areas are utilized by Canada geese for nesting and protection from predators. Sandhill cranes have been observed to nest in the area. According to the Nevada Department of Wildlife, six golden eagle and five prairie falcon eyries occur along portions of the two WSA's in Nevada, including the southern end of WSA NV-010-106. The aerial surveys were conducted by the department in 1975.

Wilderness designation for the entire portion of WSA NV-010-106 would protect wildlife habitat from potentially degrading activities.

Thank you for the opportunity to comment.

for John P. Wolflin

cc: FWS, EC, Washington, D.C.
FWS, SE, Boise
FWS, ES, Portland
FWS, ES, Reno

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2635 Mapleton Ave., #174
Boulder, CO 80302
May 24, 1984

Mr. Martin J. Zimmer
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, ID 83705

Re: Draft Owyhee Canyonlands Wilderness Environmental Impact Statement

Dear Mr. Zimmer:

Thank you for sending for my review the Draft EIS on the proposed Owyhee Canyonlands Wilderness. I am an Idaho native who is familiar with the region containing the wilderness study areas evaluated in the Draft EIS. I vacation regularly in the desert canyons region of southwestern Idaho and southeastern Oregon.

My general comment on the Draft EIS and your recommendations is that the Upper Owyhee River region contains recreational opportunities, wildlife habitat and wilderness characteristics unlike those I have seen in any other part of the nation. These areas should be given the greatest amount of protection reasonably available. Your proposed recommendation of 374,160 acres is a good start, but it should be increased substantially.

More specifically, the Draft EIS too easily dismisses acreage from wilderness recommendation. The four reasons you give for making "management adjustments" in order to reduce the size of otherwise qualifying WSAs are not, in my opinion, well considered. For example, the excuse that certain terrain and vegetation features "could not realistically be protected from off-road vehicle use" and therefore should not be included in your wilderness recommendation does not appear to be supportable, particularly not in this region.

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In the first place, the Owyhee Canyonlands Wilderness Study Areas are surrounded by several million acres of public lands, nearly all of which are crisscrossed by roads and ways which are open to use by ORVs. It is difficult to imagine that ORV use within any of the Owyhee Canyonlands WSAs is justified on the basis of need by that recreational group. Furthermore, as you know, the Bureau has adopted regulations for the management of ORVs, including the prohibition of off-road vehicle use on those areas not designated as open to such vehicles. See, e.g., 43 C.F.R. Subpart 8341. I can see no justification for your presumption that there will be ORV conflicts within any wilderness eventually designated in the Owyhee Canyonlands. The Draft EIS does not substantiate the implication that ORV users will not honor wilderness boundaries. In all events, anticipated ORV pressure does not justify acreage reduction. I suggest reinstating all those areas you consider to have such potential conflicts.

I also take issue with your conclusions that the areas that supposedly are in danger of ORV use lack "high quality wilderness characteristics and supplemental values." See DEIS at V-7. Nowhere in the Wilderness Act is there any requirement that the characteristics and supplemental values in a qualifying WSA be further subjected to a determination that they are "high quality." Neither the Federal Land Policy and Management Act nor your regulations appear to authorize you to eliminate portions of WSAs from wilderness recommendation on that basis. I respectfully request that you reconsider your decision to remove otherwise qualifying acreage on the basis of your presumptions about its relative quality. .01

I also question your elimination of some areas on the ground that they lack "protectable wilderness boundaries." That criteria also strikes me as somewhat disingenuous. This is not a military campaign. Boundaries should depend on wilderness values, not on threats, real or imagined, from the outside. The BLM has ample authority to protect wilderness boundaries from harmful incursions. Again, the Draft EIS fails to explain how the protectable boundary issue justified eliminating acreage from the Owyhee Canyonlands wilderness recommendations.

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I have the same criticisms of "inescapable external influences," another of your reasons for acreage reductions. That criteria ignores the need for wilderness of sufficient size to protect wildlife habitat and similar values from creeping development on the outside. Here I am talking principally about plateau areas. By using the "external influences" criteria as a means for determining proposed wilderness boundaries, the BLM engages in the same kind of thinking that has resulted ir the designation of only "rocks and ice" in many national forests where designating a broader, more geographically diverse ecosystem would appear to be more appropriate and more in keeping with the Wilderness Act. I suggest that designating wilderness in the Owyhee plateau areas itself will tend to reduce those external influences. People will respect wilderness; the BLM should give them the opportunity to do so in the Owyhee Canyonlands. We should not shrink from designating otherwise eligible areas simply because we fear external influences. .01

In sum, the BLM has given inadequate consideration to many key boundary areas in its Owyhee Canyonlands study. I recommend that you re-evaluate the criteria by which you have eliminated acreage at the Draft EIS stage and focus instead on the intrinsic qualities of the combined canyon and plateau areas, all of which are necessary to achieve a sufficiently diverse wilderness area in this region.

Specifically, I urge that you include the 28,000-acre parcel (OR 3-195) in southeastern Oregon and the 3,000-acre unit in the Battle Creek-Deep Creek WSA in Idaho. In the Nevada portion, I suggest reinstating the 8400 acres in the Nevada Owyhee Canyon WSA which you propose to exclude. Any potential conflicts with private property in that Nevada parcel could be solved by a road corridor and other protective measures for the affected property owners. It appears that significant additions to the proposed wilderness would have no adverse effects on cattlemen or woolgrowers. Since recreation is Idaho's second largest industry -- and its fastest growing -- it appears almost certain that a large wilderness designation will be the most beneficial in economic terms.

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I support the conversationists' proposal to designate 460,000 acres as wilderness in the Owyhee Canyonlands, including a land exchange in Oregon along the Owyhee River.

Thank you for your consideration. Please include my comments in the record.

Very truly yours,

Jeffrey C. Fereday

JCF:lss

cc: Idaho Governor John V. Evans
Nevada Governor Richard Bryan
Oregon Governor Victor Atiyeh
Senator James McClure
Senator Steve Symms
Senator Robert Packwood
Senator Mark Hatfield
Senator Chic Hecht
Senator Paul Laxalt

IDAHO DEPARTMENT OF FISH AND GAME
600 South Walnut • Box 25
Boise • Idaho • 83707

May 24, 1984

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Mr. Martin J. Zimmer
District Manager
Boise District
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83704

Dear Joe:

Department of Fish and Game personnel have reviewed the Owyhee Canyonlands Wilderness Draft Environmental Impact Statement (DEIS), and we offer the following comments.

Of the fish and wildlife values involved, our primary concern is that the important relationship between the canyons and adjacent plateaus be recognized in evaluating wildlife habitat needs and that sufficient plateau area as well as the canyons themselves be included in wilderness.

We feel that the proposed action which recommends 217,060 acres in Idaho for wilderness designation includes adequate area for wildlife purposes and is compatible with the Department's management objectives.

The Department, therefore, supports the Bureau of Land Management's preferred alternative, All Manageable Wilderness.

Overall, we found the DEIS to be very well prepared and organized, clearly pointing out the minimal conflicts and the importance of this unique area for its recreational, wildlife and scientific purposes.

The opportunity to comment on the DEIS is appreciated.

Sincerely,

Jerry M. Conley
Director

cc: Region 3
Wildlife Bureau
P. Cunningham
Governor's Office

• EQUAL OPPORTUNITY EMPLOYER •

Pete Wyman
Rt. 5 Box 309
Spokane, Wa. 99208
May 19, 1984

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Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise ID 83705

RE: Canyonlands Wilderness Enviornmental Impact Statement

I support the All Wilderness Alternatives of 436,047 acres. I can find no rationale for deleting the 61,887 acres in OR 3-195.

EROSION
Potential erosion would be less in the All Wilderness Alternatives as noted on II-18, while increased erosion would likely occur on the Plateau in the All Managable Alternative (page IV-18). The "major soil types in the WSA, have moderate to high erosion potentials" (page IV-19). Yet the major reason for deleting the plateau lands is that the naturalness will decline from increased grazing use and development projects (p. ii, iv). You seem to be saying let us increase grazing so we can increase erosion, so that the plateau can be deleted from Wilderness designation! I would suggest that the public and the soil would be better served without the increased grazing. .01

What is the condition of the soil in Idaho and Oregon? What is the condition of the land in the current AUM's since you called for range improvements? The state of Idaho's Enviornmental Overview notes that "all meadows in Owyhee County and Juniper Mt." are overgrazed. So we reward ranchers by increasing grazing and spending taxpayers' money to make "improvements", which negates Wilderness.

There is no reason given why grazing should increase in the WSA's. There are 25 million BLM acres in Idaho and Oregon, yet we know the BLM will be niggardly in any wilderness recommendations in those states. Since Wilderness will represent such a small percentage of the total, there is little reason to increase grazing in the Owyhee Canyonlands. Furthermore, BLM and Forest Service lands only produce about 2% of the total beef consumed by Americans. You have not made a very convincing case why 56 range users should increase their allotments within the WSA's, since most of them have land outside of the WSA's .02

BUREAU OF LAND MANAGEMENT
p. 3

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In particular, Map 7 and the study should also show Idaho WSAs 16-40, 16-41, 16-42, 16-45 and 16-47. These should have been included in the Canyonlands EIS. Bureaucratic or jurisdictional reasons should not predjudice the Owyhee ecosystems.

Wsa OR 3-173A should also have been included in the study and much of it should be wilderness. BLM Wilderness Inventory for March 1980 notes that it offers "outstanding opportunities for solitude and primitive recreation". .05

SUMMARY
I question the "accuracy" of the terms used to describe the alternatives. Although the "All Manageable" alternative may be more difficult to "manage" due to funding levels of the BLM, I suspect that it is more of an excuse for grazing or a lack of will rather than feasibility to manage. Also, the "Wildlife Wilderness" alternative may be a misnomer. I didn't see a lot of evidence of increased wildlife populations under this alternative. What studies do you have that show increased grazing will cause an expansion of wildlife - except maybe coyotes. Historically, if cattle and wildlife conflict, it is the latter that gives way.

In summary, the plan is reasonably well done. The lack of economic costs is a major deficiency. The reasons for leaving out the 61,887 acres is less than overwhelming. A far more serious problem is the decision to atomize the WSAs into seperate plans that makes it easier to "divide and conquer". It makes it more difficult to use an ecosystem approach. The "divide" technique has been used by the Forest Service to include both sides of a river into seperate planning units! I will give you credit for not doing that, although you left out OR 3-173 and those of the Middle and North Forks that logically should have been included in this plan.

Although I am currently living in Spokane, I am an Idaho property owner and was born and raised in the state. I have floated the Owyhee River, hiked and photographed in the area for twenty years. The Owyhee River must be protected at all costs. I do not think it is too much to ask the few allotees to give up, in the name of the 1000's of users and the millions of owners and potential users. The Canyons of Idaho and Eastern Oregon are one of the great treasures of our land. The BLM has a chance to make a great decision, at best they will probably do something mediocre.

"The ultimate test of a man's conciousness is his willingness to sacrifice something today, for future generations, whose words of thanks will not be heard."

Pete Wyman

BUREAU OF LAND MANAGEMENT
p. 2

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DIVERSITY
The EIS neglects to mention how large the total Sagebrush Steppe ecosystem is (p. V-4, Map 8). That acreage should be compared to the administrative recommendations which will surely be a small share of the 4.6 million available for wilderness (p. V-4).

I am also concerned with reseeding the plateau with non-native crested wheat grass. It is crucial that we retain significant amounts of native grasslands for a genetic resource bank. Undisturbed native grasslands are becoming increasingly rare. How much of the original grasslands remain in the entire Sagebrush Steppe ecosystem? .03

WILDLIFE
You admit that wildlife habitat is rated "fair to poor condition on the plateaus" (p. III-7). Further, pronghorn antelope are limited to the plateaus above the Canyons; yet you want to leave out a major plateau and place more cattle on it, which will hardly be conducive to wildlife, even though you may make some improvements at taxpayers expense.

ECONOMICS
There is no great economic reason for not picking the All Wilderness Alternative since the employment and income from grazing are almost identical between it and the preferred plan. The Draft EIS is deficient in that it fails to give any cost data for the increased grazing allotments. Also, there is no benefit/cost data for the improvements. Why should the public continue to subsidize increased allotments that the plan budgets? The U.S. Navy at Boardman, Oregon, received bids from $6.10 to $12.16 per AUM in 1982 (the area received about eight inches of rainfall a year.) Why is this so much more than the $1.36 (?) received locally? .04

ADJOINING LANDS
The plan fails to include all of the natural watersheds and tributaries to the Owyhee River (WSA 16-40) and the middle fork of the Owyhee (WSA 16-45) and the surrounding Juniper Mountain WSAs (14-41, 16-42, 16-47) as noted in the draft Owyhee EIS (1982) should be added to the Wilderness Proposal. I have been unable to find any scientific reason for dividing natural water systems and ecosystems beyond man-made political reasons.

All WSAs that are adjacent to or that include the Owyhee River Canyons should have been included in the study. It would be more helpful if Map 7 would have included those areas including those surrounding Lake Owyhee, Honeycombs, Leslee Gulch, etc., eg., OR 3-77B, 3-77A, 3-75, 3-56, 3-73, 3-128A, 3-111. Many of those areas are contiguous to OR 3-59, 3-110. .05

May 21, 1984

Mr. Martin J. Zimmer, District Manager
Boise District Office
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

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RE: Comments upon the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement

Dear Mr. Zimmer:

I greatly appreciate this opportunity for public comment upon the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement. I have a number of specific issues to address and some more general comments on the EIS.

There are very few scientific or agency report references in your bibliography. The following references should be listed and cited in the text:

Fortune, J.D. and K.E. Thompson. 1969. The Fish and Wildlife Resources of the Owyhee Basin, Oregon, and Their Water Requirements. Completion Report Fisheries Stream Flow Requirements, Project F-69-R-4, Job Number 2, Oregon State Game Commission.

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

Bisbee, L. and R. Elle. 1967. A Physical and Biological Investigation of the Owyhee River and Its Tributaries in Oregon, June 1964-December 1966. Oregon State Game Commission. Federal Aid to Fish Restoration Completion Report, Project F-69-R-4, Job Number 2.

Washington Instruction Memorandum No. 80-393 (directing the BLM to assess the suitability of the portion of the South Fork of the Owyhee River included in the Nationwide Rivers Inventory for inclusion in the National Wild and Scenic Rivers System. This assessment must be completed by 1990.)

Heritage Conservation and Recreation Service. 1982. Nationwide Rivers Inventory: A Report on Natural and Free-flowing Rivers in the Northwestern United States. (The study was carried out by the HCRS and completed by the National Park Service. The final listing was compiled on January, 1982. The South Fork of the Owyhee River appears on page six, attached.)

Gilbert, C.H. and B.W. Evermann. 1895. A report upon investigations in the Columbia River Basin with descriptions of four new species of fishes. Bull. U.S. Fish. Comm. 14 (for 1894): 169-210. (Gilbert and Evermann describe the Owyhee River as follows: "The Owyhee River is a large stream rising in the mountains of Nevada and flowing into the Snake River at the boundary between Idaho and Oregon, south of Huntington, Oregon. The salmon are said to enter this in quantity, and are well known to the miners on the headwaters of the stream. This is a river of much importance, to which nearly all the streams of northern Nevada are tributary."

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The Livestock Grazing (III-11) section makes no mention of current or future allocations of AUMs to wildlife. What is the present AUM allocation for wildlife and what would be the allocation levels under each of the Alternatives? Have varying levels of forage been allocated in each of your grazing allocation scenarios under each alternative to adequately provide for projected growth in bighorn sheep and other wildlife species? .01

The description of Wildlife Values (III-7, III-8) seems cursory and without a species list it is difficult for the reader to get an idea of the species diversity. By only hitting what you consider the highlights of the wildlife resources you miss one of the primary values of relatively undisturbed habitat - that is the high species diversity of native species which are excluded or diminished in non-wilderness habitats. .02

On page III-8 in this section you should mention that historically fall chinook salmon and steelhead used the Owyhee River and contributed seasonally to Native American diet (see Gilbert and Evermann, 1895 and USDI-National Park Service, 1979 for a brief mention of this). What species of sculpin is present in the Owyhee system? I have heard that there is an undescribed species which could be present. Which dace occurs in the drainage - if it is Rhinichthys falcatus it would be an interesting southern occurrence (one can't tell from Simpson and Wallace, 1978). Fortune and Thompson (1969) cite both R. falcatus and R. cataractae. I'm attaching their species list. .03

The Owyhee River Wild and Scenic River FEIS should be cited in this document. Similarly, the Nationwide Rivers Inventory description of the South Fork of the Owyhee River as a promising candidate for Wild and Scenic qualification should be cited. I am attaching a copy of that listing. The BLM is required to carry out Wild and Scenic River qualification studies by 1990, according to its memoranda (various executive orders). In general, the description of the relationship of the Wild and Scenic River studies and promising reaches is cursory and abbreviated. One of your maps should indicate the reaches of both the Owyhee and South Fork and their relationship to the WSAs studied. .04

On page I-8, paragraph 7 sub Other Considerations Related EIS and Planning Recommendations, how can the reviewing public understand the way in which "the proposed action and alternatives presented in the Oregon Wilderness EIS are being coordinated with those of the Owyhee Canyonlands Wilderness EIS" when that document is not available to the public for review? In wilderness systems, the interrelationships of adjacent lands is very important as in this case there is a strong biological connectedness, so that the design of the wilderness is important. In this context I am strongly supportive of the Conservationist's All Wilderness Alternative of 460,000 acres. It is critical for the BLM and State of Oregon land exchange to occur to allow inclusion of the canyon and bighorn sheep habitat in the wilderness area. I support the 1.2 million acre comprehensive Owyhee Canyonlands Wilderness proposed by the Committee for Idaho's High Deserts and other conservation groups. The southeastern part of the Owyhee River Canon WSA (OR-3-195) comprising 28,000 acres should be included in the Wilderness. Inclusion of this parcel would protect antelope, bighorn sheep habitat and other wildlife values, and would terminate the possibility of speculative mining in the heart of a large encircling wilderness. This area is of high ecological and watershed value, and the best way to achieve realistic management is to close the ways into the site. The new boundaries resulting from reducing the WSA would be difficult to find and manage as they follow artificial rather than easily identifiable natural features. In terms of both ease of management and retaining ecologicaly integrity, the WSA should not be eroded. I strongly urge the BLM to include the southern 8,350 acres of Nevada's Owyhee Canyon WSA in the Wilderness Proposal with a 100 foot road corridor accessing private property along the river. This move .05

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would serve the dual purpose of allowing additional access to the river and at the same time would protect bighorn sheep and other habitat values. In all of the WSA areas I urge the BLM to more closely examine possibilities for closing roads within the Canyonlands Wilderness. This would greatly enhance management, and would serve to protect wildlife and natural character of the area. .05

The significance of having a buffer zone above and outside the river corridor cannot be overemphasized in terms of protecting the corridor itself. The All-Wilderness Alternative would accomplish this. This kind of bluff top habitat may provide forage populations for raptors inhabiting the canyon.

One gets little sense of topography or geology in the area, yet it is one of the remarkable natural features which makes this the wilderness it is and contributes greatly to the high quality scenery of the area. Why not include a drawing or photograph of a plastic relief map of the area, which would convey very well the canyon corridor and its relationship to the surrounding topography. Here is a brief description of the topography from a geology text which better conveys an idea of the lay of the land:

"Where the Owyhee River turns north it cuts across the Owyhee Mountains in a gorge 50 miles long and, for much of its length, is about 1,500 feet deep. The river, incised in the uplifted Tertiary and Quaternary lavas and lake beds, is at an elevation of about 3,000 feet where it enters the gorge, and is at about 2,300 feet where it emerges on the Snake River Plain. Owyhee Dam, near the lower end of the gorge, forms a reservoir that extends most of the way across the uplift. This reservoir provides a good datum for determining whether uplift across the gorge is continuing at the present time.

The southern boundary of the Payette Section is south of the Owyhee River trough, where the flank of that northwest-trending syncline is interrupted by the northerly trending block mountains of the Great Basin. The boundary is an arbitrary line through a zone almost 50 miles wide, where the two structures, although very different, grade into one another. In general, the Payette Section is a northwest-trending structural basin separating the structurally higher Great Basin from the Idaho batholith. Downwarping of the Payette Section in late Cenozoic time apparently was contemporaneous with the block faulting in the Great Basin."

This kind of description could be elaborated to give a better feeling for the entire Owyhee Canyonlands Wilderness area.

Dr. Riley McClelland once stated:

"Resource managers must 'think in ecosystems,' i.e., they must relate every decision and every action to the entire complex picture rather than to an isolated component of the ecosystem or to considerations based on expediency...Active management measures are necessary to protect and perpetuate these portions of a natural area that remain 'unimpaired.' Restoration of man-altered landscapes will require technical skill, patience, and a considerable shift in existing management priorities." Today we are in the fortuitous position of being able to preserve one of the largest desert wilderness ecosystems in the world, certainly on this continent. I urge the BLM to forward the All Wilderness Alternative as its proposed action in the Final EIS.

Thank you for your consideration. Please include this statement in the Owyhee Canyonlands Wilderness record.

Sincerely,

Peter A. Bowler
Star Route
Bliss, Idaho 83314

SIERRA CLUB

Toiyabe Chapter – Nevada and Eastern California

May 23, 1984

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Joe Zimmer, Manager
BLM/ Boise District
3948 Development Ave.
Boise, ID 83705

Dear Manager Zimmer,

On behalf of the Public Lands Committee of the Toiyabe Chapter of the Sierra Club, I would like to add these comments to those I made at the public hearing in Reno on April 17, 1984.

First, I would like to support the 1.2 million acre comprehensive Owyhee Canyonlands Wilderness proposed by the Committee for Idaho's High Desert and other conservation groups. This includes the All-Wilderness alternative of 436,000 acres as well as other wilderness lands (including the 28,000 acre area in the southeastern part of the Owyhee River Canyon WSA in Oregon and the 3,440 acre area in the southern portion of Idaho's Battle Creek - Deep Creek WSA). I would especially recommend that BLM exchange land with State of Oregon along the Owyhee River to include the canyon and the bighorn sheep habitat in the wilderness.

Second, I would support more Nevada lands being included in the wilderness recommendation, particularly the southern 8,350 acres of the Owyhee Canyon WSA. I have no objections to a 100-ft. wide corridor to the private property along the river, if access is ever needed at that spot.

Third, I also would urge BLM to close as many roads as possible within the Canyonlands Wilderness, removing manageability problems and increasing protection for wildlife and other values of the Canyonlands.

I would like to compliment you and your staff on a very well-written and presented EIS. It appears that your district has a real appreciation for the land and its wilderness values, unlike many other BLM Districts which remain uncomfortable with all non-commodity values on the public lands.

Sincerely,

Rose Strickland, Chair
Public Lands Committee of the Toiyabe Chapter of the Sierra Club

LAS VEGAS GROUP
P.O. Box 19777
Las Vegas, Nevada 89119

GREAT BASIN GROUP
P.O. Box 8096
University Station
Reno, Nevada 89507

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Bill Hoffman
155 NW Kings, #N410
Corvallis, OR, 97333

To: The District Manager, Bureau of Land Management
230 Collins Road, Boise, Idaho, 83702.

Dear Sirs:

I am writing in response to the public comment period designated for your Owyhee Canyonlands Draft Environmental Impact Statement, and have several comments I would like to make. First of all, I am strongly in support of setting aside our largest and most contiguous wilderness study areas in an attempt to maintain representative ecosystems, even if it means less total acreage overall. I think that a large number of smaller wilderness areas will be much harder to maintain than several large tracts of land, and it will much more difficult for wildlife to maintain itself with the presence of encroaching surrounding developments. The Owyhee Canyonlands is a truly outstanding and representative tract of undeveloped and pristine land, probably the last of its kind in the world, and I think it is imperative that this not be changed or destroyed. I attended your recent hearing in Portland where a representative from the Committee for Idaho's High Desert introduced a comprehensive 12 million acre wilderness proposal for the area, and I would like to express my strong support of this.

I would also like to comment on several particulars of your proposal. Many people at your Portland hearing were unhappy with the fact that the BLM seemed to be excluding too much tableland back from the canyon rims. Arguments were made that wildlife need this land for forage and that it also adds diversity to the proposal. I tend to agree with this, but more importantly I think it is necessary to include this land to prevent range developments and vehicle use encroaching on the canyons, potentially destroying the wilderness experience of those using the river. I am afraid that anything not

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designated wilderness is going to be quickly seeded or otherwise developed, and that activities like this very near the major use corridors of wilderness visitors (as well as wildlife) will be a severe detriment. I understand that wilderness areas are to be self-sustaining and that BLM is not supposed to consider "protection zones" around an area. But BLM is supposed to create a sensible and manageable wilderness area. These table lands back from the canyon rims are more than satisfactory as wilderness quality lands. They are pristine, necessary for wildlife, add diversity to the proposal, and the only thing BLM seems to be holding against them is that they are not exciting. Regardless of BLM's opinions, these lands are going to be an absolute necessity in developing a manageable wilderness program. I recommend that the boundaries of every study area be drawn back at least 1½ miles from the canyon rims where not prevented by roads, land ownership, etc.

Regarding the controversial Toppin Creek area, I still am not sure of the exact reasons BLM left this area out, and am less sure that it was justified. As far as I can tell, this area has just as much wilderness potential as any of the surrounding country, and I urge that it be put back into the BLM proposal. Regarding land ownership, I think the BLM tends to over-estimate the difficulties that might be involved. I think that both private and state lands should be acquired wherever they enter a study area (if possible), and that boundaries should not be so greatly influenced by where these lands lie. And lastly, I would urge that in the final EIS, more attention should be paid to smaller, non-game wildlife and flora rather than bighorn sheep. These are more likely the types of wildlife the average visitor will encounter, and are certainly just as important to the ecosystem as sheep. .01

I would like to see the BLM take the time to sit down and discuss seriously the proposal introduced by the Committee for Idaho's High Desert. The Owyhee Canyonlands is one of our most important wilderness proposals, and should not be rushed through the process, even if it means revising your EIS to include more land. Thankyou for the opportunity to comment.

Sincerely, William H. Hoffman

AUDUBON SOCIETY OF PORTLAND

A Branch of National Audubon Society

PHONE 292-6855 • 5151 NORTHWEST CORNELL ROAD • PORTLAND, OREGON 97210

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May 15, 1984

Joe Zimmer, District Manager
Boise District BLM
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

On behalf of the Portland Audubon Society, a 3700-member chapter of the National Audubon Society, I am writing in response to the Owyhee Canyonlands Wilderness Draft Environmental Impact Statement. Among the goals of the Society is the protection of wildlife and habitat. Accordingly, we view the classification of "Wilderness" through the National Wilderness Preservation System as the best federal land use protection for those natural values.

As the Bureau of Land Management begins its public review process of Wilderness Study Areas (WSA's) for inclusion in the federal wilderness system, we advocate that the Owyhee Canyonlands be given the protection they deserve beyond the range of the five alternatives in the draft environmental impact statement (DEIS). We are writing in support of an enhanced, all-wilderness alternative. The Society has been working with CIHD and looks forward to continuing to support the much larger Owyhee Wilderness proposal of 1.2 million acres, which would include other Idaho, Nevada and Oregon areas not addressed in this DEIS. We stress the importance of multi-state coordination in this wilderness review process to protect animal and plant species in the Canyonlands. The enhanced all-wilderness alternative would facilitate closing as many roads and ways as possible thereby improving manageability and protecting ecological and cultural resources. We are sorry that you did not consider an enhanced all-wilderness alternative in the DEIS. .01

Before making specific comments, we would like to compliment the BLM on two counts. First, we are very pleased that you have recognized the wilderness values in the Owyhee and recommended a large wilderness area. Second, although we have some specific criticisms with portions of the DEIS and would like to have seen more maps with greater detail, we found the document to be generally readable and easy to use.

I. Toppin Creek Plateau

A. Critique of Criteria

Our first point is concern over the deletion of the 28,000-acre plateau country from the south-central part of J-195. You apparently deleted this area to improve manageability, but we don't believe you have met your criteria for eliminating WSA lands. .02

1. Your criterion says that there are existing resource developments that locally impact naturalness. We find no evidence that the area is not substantially natural.

- Quoting from the Final Statewide Inventory for Oregon and Washington, November, 1980:

p. 450, "Toppin Creek reservoirs are substantially unnoticeable."

p. 451, "and the ways are unnoticeable. Sagebrush provides screening."

From the Unit Resource Analysis (URA) for J-195:

p. 13, "Fences are substantially unnoticeable on the plateaus where space is virtually limitless."

p. 13, "Plateaus are flat and vast. All this uninfluenced acreage assures the visitor of high quality wilderness experience in terms of the naturalness of the area."

- From the DEIS:

"On the plateaus, imprints are generally obscured by sagebrush or small changes in topography within one hundred feet to several hundred yards."

2. Your second criterion says that areas deleted because of ORV use had to be lacking in high quality wilderness values. We doubt that ORV pressure is heavy in the rocky plateau area we're discussing, but even if it were, the area has high quality wilderness values. .02

- Again, quoting from the Statewide Inventory:

p. 451, "nearly unlimited outstanding opportunities for solitude."

p. 452, "sheer vastness allows one to find solitude"

p. 452, "once out on the sagebrush flats, unimpeded hiking, horseback riding, snow shoeing or cross country skiing can be experienced for many miles"

p. 452, "from the plateau one can view the Owyhee Range, the Santa Rosas, and the Trout Creeks"

- From the URA:

p. 4, "vistas afforded from the flat are nearly unrestricted except for minor screening by the hills while the views from the hills themselves are unimpeded."

p. 5, "7 miles of Toppin Creek provides an additional spectacular canyon environment."

p. 22, "lack of vegetative screening does not appreciably affect solitude."

- From the DEIS:

"hiking on the plateaus also provides an opportunity to experience vast open spaces stretching into the distant horizon. Because of the miles of canyons and the large size of the plateaus, quality primitive recreation experience can last several days to a week or more."

3. The third and last criterion, inescapable external influences and private inholdings, appears not to apply. Only state lands (due to be traded) are included and they don't pose management problems.

B. Supplemental Values

We believe the plateau should be included as wilderness because it clearly has wilderness values, there are no major conflicts, and we'd like to see its supplemental values given wilderness protection.

1. First, according to the URA, there is an environmentally sensitive area and threatened plant species at the head of Toppin Creek.

2. Next, three of the plant communities on the plateau, low sage-bluebunch wheat grass, low sage-Idaho fescue, and silver sage communities are high priority unfilled cells according to the Oregon Natural Heritage Project. The silver sage community documented in the Data Base is at Bull Flat Lake, an area which is right on the border of the Toppin Creek plateau. These vegetation communities are in good to pristine condition on some portions of the plateau. If these communities were in wilderness, their ecological condition would improve. You expect it to deteriorate if the area is not declared wilderness.

3. We also think the plateau needs protection as wildlife habitat. Sage grouse are decreasing in numbers; they depend on the sage-grass communities on the plateau and a number of passerines such as sage sparrows, vesper sparrows, Brewer sparrows, and green-tailed towhees use mixed sage-grass communities.

To summarize, we think these supplemental values need protection and plateau is also important because its vastness provides a different kind of wilderness experience. The rhyolite-canyonlands/sagebrush-bunchgrass ecosystem is currently not represented in the NWPS. The low sage and silver sage communities should also be included, and, it seems to us that our best opportunity to add plateau country to the wilderness system is where it can be seen and used in juxtaposition with the spectacular Owyhee canyons. Each enhances the other.

II. Wildlife Impacts

Addressing another point, we believe that a serious weakness of the DEIS is its treatment of the impacts on wildlife. Where areas are managed primarily for livestock, particularly when they are seeded, there are major impacts on such species as sage grouse, small mammals, snakes, and passerine birds.

Where areas are in a natural condition, as in the Owyhee, we'd prefer to see them protected and their value as wildlife habitat enhanced. We think an alternative short of wilderness will negatively impact wildlife habitat, but you have not examined this concern in the DEIS. .03

III. Closing Roads

Our third point is the request to close roads and ways in the all-wilderness alternative. We support your closing to the general public any roads and ways not needed for access to the river; we would support access for local ranchers when they need it to tend livestock. The cherrystem road in the south central plateau is a good example. It's not much of a road anyway, and its closure to anyone except local ranchers would seem to solve the only management problems you seem to have. .04

Portland Audubon Society --- Owyhee Canyonlands DEIS

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IV. Bighorn Sheep Habitat

In offering our support for an enhanced, all-wilderness alternative, we also recommend a BLM-State of Oregon land exchange to include part of the Owyhee River Canyon and adjacent bighorn sheep habitat in the proposed Canyonlands Wilderness. This is the only alternative that protects not only the bighorn sheep and canyon-dependent wildlife but also the mule deer, antelope, sage grouse, and other plateau wildlife as well. .05

Thank you for the opportunity to comment on this document.

Sincerely,

Linda S. Craig

Portland Audubon Society
5151 N.W. Cornell Road
Portland, Oregon 97210

phone: 503-222-2606

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It is, therefore, vital that adequate plateau acreage be included in the wilderness plan.

We support the All Manageable Wilderness Alternative plus the 8,350 acres in Nevada rather than the Wildlife Wilderness Alternative (287,490 acres) because we consider the lower acreage proposal to be too conservative an estimate of the habitat needs of wildlife associated with the canyonlands. As we understand it, the plateau acreage for this proposal corresponds principally to the forage needs of the California bighorn sheep. We feel that the plateau area should be extended further to minimize human disturbances on surrounding lands. Hunted populations of bighorn sheep gnerally are not toleratant of human activities in close proximity to their home ranges. Because the flat terrain in the study area affords a long line-of-sight viewing distance, sheep behavior and habitat use can be affected by activities over a mile away. We feel that the extended acreage in the All Manageable Wilderness Proposal is a necessary safeguard to protect bighorn sheep habitat. The additional acreage will also benefit several other native species.

We appreciate the chance to comment on this draft.

Sincerely yours,

Charles L. Blair
Vice President, Idaho Chapter
of The Wildlife Society

CLB:gb

IDAHO CHAPTER
THE WILDLIFE SOCIETY

NATIONAL HEADQUARTERS
SUITE 5176
2900 WISCONSIN AVE. N.W.
WASHINGTON, D.C. 20016

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Charles L. Blair
139 E. Gettysburg
Boise, Idaho 83706

May 29, 1984

Mr. Joe Zimmer
Boise District Manager
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

The Idaho Chapter of the Wildlife Society has reviewed the Draft Environmental Impact Statement for the proposed Owyhee Canyonlands Wilderness. We recommend that 382,510 acres be designated as wilderness. This acreage includes the All Manageable Wilderness Alternative (the proposed action) and 8,350 acres of canyon and plateau in Nevada on the South Fork of the Owyhee River that were omitted in this alternative. This omitted area provides important California bighorn sheep habitat and has a high density of nesting raptors. Its inclusion as wilderness should be reexamined by the Bureau.

During our review of the document we contacted several biologists familiar with the wildlife resources of the area. Our recommendations encompass most of habitat for the California bighorn sheep in the study area as well as habitat for numerous other wildlife species indigenous to the area. The life requisites of these native species must be provided for if the Owyhee Canyonlands are to maintain their wilderness values. The plateau area extending out from the canyon is very important in this regard, not just to California bighorn sheep but also to other species such as mule deer, sage grouse, and raptors. The proposed acreage of plateau rangelands provides necessary food and solitude for the canyonland wildlife. Increased completion with livestock for available forage and human disturbances as a result of mineral entry or recreational access roads on the plateaus would be detrimental to these wildlife species. These interactions would adversely affect the wildlife related wilderness values of the canyonlands.

The Bengochea Hotel
SUITE ONE

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May 26, 1984

Mr. Martin J. Zimmer, District Manager
Boise District BLM
3948 Development Avenue
Boise, Idaho 83705

Dear Joe:

Please include these comments, along with my oral statements made at the Jordan Valley and Boise hearings, in the record of the Owyhee Canyonlands Wilderness EIS.

I am pleased that the Draft included a significant portion of the WSA within the Wilderness recommendation. It is a tragedy that more conservationists were not active in the BLM Wilderness process during the initial and intensive inventory stages. For that reason I feel that the whole process is flawed. Regardless, I respectfully offer the following technical and substantive comments on the Draft.

First, please include a grazing allotment overlay or map in the Final Draft. Also, please include a map identifying areas of planned vegetative manipulation and other planned grazing developments. Please identify proposed utility corridors. Without these the document is essentially worthless to the non-consumptive users of these lands. The Final document must be site specific. The Draft is not. .01

I urge the adoption of the All Wilderness Alternative as a core within the Conservationist's 1.2 million acre Owyhee Wilderness recommendation. The Owyhee River Country is the largest unprotected roadless area remaining in the lower Forty Eight States. It includes perhaps three million acres of contiguous roadless land at this time. The 374,160 acre BLM recommendation represents a monumental concession to exploitative special interests.

Perhaps one hundred and fifty million acres of public land are available for mineral exploration and development in Idaho, Nevada, and Oregon. Certainly a little under one percent of these lands could

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be reserved for our children within the Owyhee Canyonlands Wilderness. Lands outside the WSA are statistically as likely to contain mineral potential as are areas within the WSA. Since these lands have not been mined in over one hundred and forty years of American occupation, they are not likely to contain significant mineralization. Even if mineralization is discovered someday, that is no reason to rape and plunder a rare wilderness representing one-hundredth of one percent of America. Is there no sanity?

I am shocked to again find an agency Wilderness proposal that advocates increasing grazing within the Wilderness boundary. I have a suggestion: every time the BLM recommends an increase in grazing within a Wilderness, conservationists should receive an equivalent percentage increase in the size of the Wilderness area. What is good for the goose is good for the gander. Or has the doctrine of fairness completely left our system of government? Alternately, if the agency insists on increasing grazing within wilderness, it should reduce grazing on non-Wilderness lands.

The salt shrub desert ecosystem has already been destroyed in Idaho by grazing. Range condition continues to decline over millions of acres of sagebrush steppe ecosystem. Wilderness designation is the only protection I trust to protect the sagebrush steepe ecosystem from going to extinction like the salt shrub desert ecosystem. Wilderness is essential to protect the watershed and wind shed of the Owyhee drainage. Millions of acres of ravished rangeland attest to the protection afforded by non-Wilderness designations. What specific long range and short term management goals and practices is the BLM implementing on non-Wilderness (dropped) Owyhee Canyonlands to assure that desertification is not spreading across these ravished rangelands?

I do not believe, nor do I think that most conservationists believe, that the Bureau of Land Management is capable at this time of preserving the ecological quality of its non-Wilderness lands in the face of political pressure from the livestock grazing industry.

The Owyhee Canyon (OR-3-195)--Lookout Butte complex is the largest example of roadless sagebrush steppe ecosystem in Oregon or Idaho. It may be the best situation where size alone provides the solitude that the BLM has prejudically failed to find in most "big, flat, ugly" desert areas. Repeatedly, we have seen flat de facto desert wilderness rejected from Wilderness recommendation. Our desert ecosystems are being represented within the Wilderness System by atypical wooded uplands, intrenched rivers, and high, rugged mountains. These features represent perhaps five percent of the desert surface. Without inclusion of "big, flat, ugly" in the Wilderness System, and with the rapid pace of agricultural development (i.e., sprinkler water mining of all the valleys) our people will have no concept of the true nature of the Western desert in one short generation. The desert has essentially vanished, already, from .02

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lands visible from highways in Idaho.

Has the BLM considered that the Owyhee desert may not be at climax? Substantially all of the sagebrush steppe in Idaho has been burned off in historical times, so that only young specimens of sagebrush remain. Yet, I have observed many examples of six to eight foot sagebrush in surviving remnants of the Owyhee desert. The BLM's own A Grazing History of Southwestern Idaho by Dana Yensen contains an engraving from the time of the Oregon Trail migration of the "Artemisia" forests of the Snake River Plain.

What is the height of mature sagebrush on the Owyhee Plateau? Have fires reduced vegetative screening? Will the present short (read young) sagebrush one day provide much greater vegetative screening? By analogy, would a burned off de facto forest wilderness be excluded from Wilderness consideration because it temporarily failed to provide vegetative screening? .02

I strongly urge that the Final Wilderness recommendation include Lookout Butte (OR-3-194a) and Toppin Creek (OR 3-195). Toppin Creek provides substantial pronghorn antelope habitat. Excluding this unit will place the Wilderness boundary close to the canyon, thus making management of bighorn sheep habitat more difficult. Removing Toppin Creek will increase interaction between humans and bighorns. Excluding Toppin Creek may one day allow mining, roads, or other development into the middle of the Owyhee Canyonlands Wilderness. Besides intruding into the Wilderness with various impacts, increased human activity at this point may make a nightmare of management of Wilderness values and also of grazing.

The excluded portion of Toppin Creek represents the watershed to Toppin Creek proper, a tributary to the West Little Owyhee, and hence the Owyhee River. Watershed, wildlife, and ecological integrity require the inclusion of the Toppin Creek Watershed as well as Toppin Creek Canyon.

The density of ways and stockponds in Toppin Creek and Lookout Butte are inconsequential. Every desert traveler knows that ways, assuming that they can actually be located on the ground, have an insignificant impact on the Wilderness experience. Often, BLM ways can not be located on the ground. The average density of stockponds is not significantly different between these units:

Toppin Creek: $\frac{10 \text{ stockponds}}{33{,}000 \text{ acres}} = \frac{1}{3300 \text{ acres}} = \frac{1}{5.15 \text{ sq. miles}}$ .03

Onehalf of the stockponds are concentrated within one-half mile of the cherry stem road, so that the average density of ponds in the field is closer to one stockpond per ten square miles. Hardly a

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substantial impact of man.

Owyhee Canyonlands excluding Toppin Cr.: $\frac{25 \text{ ponds}}{229{,}000 \text{ acres}} = \frac{1}{9160 \text{ acres}} = \frac{1}{14.3 \text{ square miles}}$

Lookout Butte: $\frac{16 \text{ ponds}}{105{,}000 \text{ acres}} = \frac{1}{6562 \text{ acres}} = \frac{1}{10.25 \text{ sq. miles}}$ .03

I believe that Oregon has no other substantial WSA acreage of sagebrush steppe ecosystem except in the Owyhee below Rome, and in the Cottonwood Creek--Gold Creek--Camp Creek--Sperry Creek complex. The Owyhee is the only substantial sage plateau under consideration in Oregon. Other WSA's lie within the basin and range province, or within the grassland of the Columbia Plateau.

I urge the BLM to leave the vast de facto wilderness of the Owyhee River Plateau intact. I urge the agency to show courage and not open this irreplaceable wilderness to special interest exploiters.

Respectfully submitted,

Randall E. Morris

STATE OF NEVADA

RICHARD H. BRYAN
Governor

LINDA A. RYAN
Director

STATE OFFICE OF COMMUNITY SERVICES

Capitol Complex
Carson City, Nevada 89710
(702) 885-4420

May 25, 1984

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Mr. Martin J. Zimmer
District Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

NV SAI No. 84300073 RE: Governor's Consensus Position

Dear Mr. Zimmer:

As the designated single point of contact, this office is submitting the Governor's consensus on the Draft Owyhee Canyonlands Wilderness EIS.

Our position, which was developed through a consortium of State agencies, supports your proposed action for the All Manageable Wilderness Alternative for those wilderness study areas (NV-010-103A, NV-010-106) located in Nevada.

In addition, we have attached the comments of the Nevada Department of Wildlife, the Divisions of State Parks, Historic Preservation/Archeology and the UNR Bureau of Mines. These comments support the Governor's position and include specific recommendations to enhance future management alternatives of proposed wilderness study areas.

Sincerely,

Linda A. Ryan
Director

LAR/ll
cc: Andy Grose, Chief of Staff, Governor's Office

Attachment

STATE OF NEVADA
DEPARTMENT OF WILDLIFE
1100 Valley Road
P.O. Box 10678
Reno, Nevada 89520-0022
(702) 789-0500

RICHARD H. BRYAN
Governor

WILLIAM A. MOLINI
Director

298

April 12, 1984

Ms. Linda Ryan, Director
Office of Community Services
1100 E. William, Suite 109
Carson City, NV 89710

Dear Linda:

We appreciate the opportunity to review and provide comment on the Owyhee Canyonlands Wilderness DEIS (SAI NV #84300073). We agree that the subject canyonlands and adjacent plateaus do provide wilderness characteristics and the opportunity to protect and/or enhance the rhyolite canyonlands/sagebrush-bunchgrass ecosystem would also be a benefit.

The Nevada Department of Wildlife supports the proposed action for the all manageable wilderness alternative, relative to those portions within Nevada. We have no direct management responsibility outside of the state; however, we would have no opposition to the proposed alternative as a whole. We view the proposed alternative as causing no immediate or future threat to accepted game management practices within the Nevada portion. The proposal has the potential to benefit wildlife resources through the preclusion of energy and mineral development, dam construction, and vegetal treatments (spraying, seeding) on adjacent plateaus. Improved range conditions on the adjacent plateaus would increase wildlife forage availability and improve habitat conditions.

If you need additional information or have any questions on these comments, please advise.

Sincerely,

Willie

William A. Molini
Director

DE:FRK:pw

STATE CLEARINGHOUSE PROGRAM
FEDERAL IMPACT
REVIEW PROGRAM

300

OFFICE OF COMMUNITY SERVICES
1100 EAST WILLIAM, SUITE 109
CARSON CITY, NEVADA 89710
(702) 885-4420

TO:

__ Governor's Office	__ Labor Commission	Conservation and Natural Resources
__ Attorney General	X Legislative Counsel Bureau	
__ Administration	__ Library	
__ Agriculture	__ Prisons	X State Lands
__ Commerce	__ Public Service Commission	__ Conservation Districts
__ Community Services	__ Taxation	X Environmental Protection
__ State Job Training Office	__ Transportation	X Forestry
__ Economic Development	X UNR-Bureau of Mines	X Hist. Preservation
__ Education	__ UNR-Dept. of Range, Wildlife, and Forestry	& Archeology
__ Employment Security Department	XX Wildlife	XX State Parks
X Dept. of Minerals	__ Press Room-Capitol Building	X Water Planning
__ Equal Rights Commission	__ Nuclear Waste Project Office	__ Water Resources
__ Human Resources	__ _____	
__ Indian Commission	__ _____	

RECEIVED
MAR 8 1984
Nevada State Historic Preservation and Archaeology

FROM: Linda A. Ryan, Director

SAI NV # 84300073 PROJECT: OWYHEE WILDERNESS DEIS

Attached for review and comment is a copy of the aforementioned project. Please evaluate it with respect to:
1) the program's effect on your plans and programs;
2) the importance of its contribution to State and/or areawide goals and objectives;
3) its accord with any applicable law, order or regulation with which you are familiar and/or
4) additional considerations.

PLEASE SUBMIT YOUR COMMENTS NO LATER THAN 4/12/84. Write out your comments if applicable, check the appropriate box below and return the form to this office. PLEASE DO SO EVEN IF YOU HAVE NO COMMENT on this particular project so that we may complete our processing. If you are unable to comment by the prescribed date, please notify this office immediately.

reschedule comments

THIS SECTION TO BE COMPLETED BY REVIEWING AGENCY:

__ No comment on this project	__ Conference desired (see below)
__ Proposal supported as written	__ Conditional support (outlined below)
__ Additional information (see below)	__ Disapproval/denial of funding (must specify reason below)

Comments: (use additional sheets if necessary)

The Division has reviewed the above-referenced EIS. Although sites listed on the National Register are not located in the area, meny known archeological and historical sites are potentially eligible.

Regardless of whether or not wilderness designation takes place, visitor use of the Owyhee River will increase. We strongly support the development and implementation of a cultural resource management plan to protect significant sites in this area. We would be pleased to participate in the development of such a plan; please contact us regarding such efforts.

[signature] STAFF ARCHEOLOGIST (702) 885-5138 5/21/84
Reviewer's Signature Title Phone Date

STATE CLEARINGHOUSE PROGRAM
FEDERAL IMPACT
REVIEW PROGRAM

299

OFFICE OF COMMUNITY SERVICES
1100 EAST WILLIAM, SUITE 109
CARSON CITY, NEVADA 89710
(702) 885-4420

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FROM: Linda A. Ryan, Director

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Comments: (use additional sheets if necessary)

Nevada State Parks can support this Wilderness proposal for it will fill a void in the future demand for activities such as hunting, hiking, horseback riding, white water rafting, and fishing. SCORP has determined that demand will be higher than supply for those activities.

We support the all manageable wilderness alternative that is the BLM proposed action.

John Richardson, Administrator
Nevada Division of State Parks

[signature] PARK RANGER II North fork 6493 3/28
Reviewer's Signature Title Phone Date

STATE CLEARINGHOUSE PROGRAM
FEDERAL IMPACT
REVIEW PROGRAM

301

OFFICE OF COMMUNITY SERVICES
1100 EAST WILLIAM, SUITE 109
CARSON CITY, NEVADA 89710
(702) 885-4420

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FROM: Linda A. Ryan, Director

SAI NV # 84300073 PROJECT: OWYHEE WILDERNESS DEIS

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__ Additional information (see below)	__ Disapproval/denial of funding (must specify reason below)

Comments: (use additional sheets if necessary)

SEE ATTACHED SHEET

J. V. Tingley Geologist N.B.M.G. 784-6691 3/23/84
Reviewer's Signature Title Phone Date

NEVADA BUREAU OF MINES AND GEOLOGY
MACKAY SCHOOL OF MINES
UNIVERSITY OF NEVADA • RENO
RENO, NEVADA 89557-0088

(702) 784-6691

301

An important point is made on pages III-16 and III-117 of the draft EIS, the classification of mineral potential of part of this area (that in Oregon) varied greatly depending on the level of information used to make the classification. Very little literature information was available on the area studied in Oregon, and the classification made based on literature alone showed generally low mineral favorability. Later field surveys in the same area, done by the Oregon Department of Geology and Mineral Industries, resulted in significantly higher classifications.

The point applies as well to the lands within Nevada that are covered by this DEIS; at present we only have sketchy information on the mineral potential and can rank mineral potential only as "unknown". The Nevada Bureau of Mines and Geology will be conducting a detailed drainage sampling project (under contract from the BLM) in these specific areas early this summer. Our data should allow a better assessment of the mineral potential of the areas to be made.

Joseph V. Tingley

302

2) An adequate analysis of the efficiency of grazing is glaringly lacking. An economic analysis of the net values of making this land a wilderness area and the net values of development including grazing, mineral and energy development are absolutely essential to responsible decision-making. It is our position that an efficiency test should analyze all the costs and not in simple local dimensions but based upon a national model of our economy. We question the validity of the computer model used to determine and project wilderness and development economic values because it was not an efficiency model and did not assess net values. We think that comparison of these net values would clearly indicate a maximum wilderness designation to be the smartest economic decision. .01

3) Oil, gas and mineral potential for the entire WSAs acreage is low. Geovernment funded studies, including those by the US Geological Survey and the Oak Ridge National Laboratories assess significant oil, gas and mineral provinces that overlap WSAs, and the Owyhee Canyonland WSAs do not contain any of these high potential areas. Of the 24.3 million acres nationwide that are under wilderness study, only .6% are considered a high oil resource potential and only .4% are considered a high gas resource potential. Of these totals, the Owyhee Canyonlands WSAs represent a very small percentage. Currently the economic feasibility of extractive resource development in this area is not substantial enough to justify the destruction it would cause, and certainly withdrawal of a single acre for speculative reasons is not admissible under the mandates of this assessment. Although earth science information may be presented as a statement of mineral or energy resource potentials, not every favorable geologic environment has a mineral or energy deposit of economic value. Furthermore, it is our position that a mineral, oil or gas company's appraisal of resource potential is ipso facto insufficient to influence wilderness designation decisions. It should be noted here that the Wilderness Act and thus any wilderness designations allows continual assessment of the values of wilderness lands, including exploration. Additionally, strategic minerals would not be lost from our national security arsenal even under wilderness designation. Categorizing national assets can continue in the future when techonology may change what is now considered a useful resource. No study conducted in the public interest, that is, by the US Government, shows significant or high potential in the areas we are considering for gas, oil or minerals. Any resource conflict that may emerge has the risk of allowing enthusiasm for development to overcome sensibility. This would be espcially dangerous when wilderness values could be so irrevocably destroyed by, for example, surface mining for low-yield high-tonnage minerals. .02

302

THE WILDERNESS SOCIETY

FOUNDED 1935

May 31, 1984

Martin J. Zimmer, Manager
Boise District Manager
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 38705

Re: Owyhee Canyonlands Wilderness DEIS

Dear Mr. Zimmer,

The Wilderness Society is dedicated to the protection and wise management of wilderness and other federally owned lands and to their values as a living part of the American heritage. For 49 years we have been a leader in the national effort to find a balance between conservation and development, and we believe that a land ethic has now become a more deeply central part of the American character.

It is our position that the Owyhee Canyonlands are an unparalleled wilderness resource in terms of providing unique wilderness opportunities for present and future generations of Americans, in terms of adding diversity to the National Wilderness Preservation System, and in terms of restoring and maintaining wildlife habitat. We support a comprehensive wilderness designation of 1.2 million acres in line with the Committee for Idaho's High Desert proposal.

We have reviewed the DEIS and think that it is inadequate. The following comments address several areas of concern which, we believe, should receive greater analysis in the final EIS.

1) The EIS repeatedly acknowledges the negative impacts on non-designated wilderness lands in terms of erosion, vegetation and wildlife. It also acknowledges that wilderness designation of these so-called "non-suitable for wilderness" lands would have no significant economic impact on the local communities at large. Yet, the Proposed Action omits these lands from protection on behalf of the public and thus directs them into increased grazing use and other potential even speculative developments. This decision is not supported by any prudent justification. It is our assessment that the entire WSAs are wilderness worthy and that the total WSAs' acreage is infact an inadequate acreage to preserve the Owyhee Canyonlands ecosystem.

NORTHERN ROCKIES REGIONAL OFFICE
413 WEST IDAHO STREET, SUITE #102, BOISE, IDAHO 83702

(208) 343-8153

302

4) The DEIS acknowledges the central role of the Oregon and Idaho high desert along with the northern mountains of Nevada as the Owyhee River watershed. These acres of high desert plateau were in great part deleted from the potential wilderness inventory and thus from the WSAs themselves. We have continually asserted that these lands should have remained in the WSAs so that they could have been studied for their wilderness values. It is inconsistent to acknowledge the national significance of the Owyhee River's whitewater values, as the EIS does, and at the same time ignore the river's primary watersheds. The All Wilderness alternative is inadequate to provide protection for the river while a comprehensive 1.2 million acre designation such as we are recommending would provide for self-protecting wilderness. These adjacent plateau lands are necessary to make a complete ecosystem not only for the sustained values of the river but also for wildlife habitat and natural vegetation environments. .03

5) The efforts to achieve parity between the Oregon statewide EIS and this DEIS are in theory sound, yet two glaring inconsistencies surface. Specifically they involve the non-closure of cherry-stem roads in an All Wilderness alternative while these same roads remain open in an All Manageable Wilderness alternative. Secondly, land exchanges, purchases or development rights at a minimum need, in light of the dramatic negative impact development on these lands would have on wilderness values, congressional direction rather than administrative control. There is no legal barrier to inclusion of wilderness protection conditions such as these within the context of a wilderness designation, and indeed we believe they are mandated. .0

6) Management of wilderness worthy lands under an administrative Area of Critical Environmental Concern (ACED), Habitat Management Area (HMA), Visual Resource Management (VRM) area, or other such program is inappropriate. Such management programs are subject to the frailities of administrative interpretation and enforcement, and they lack permanence. For example, this DEIS states that moderate to significant reductions in naturalness would occur under such a management program. It is essential to protect all wilderness worthy lands with congressional designations.

7) The DEIS specifically acknowledges that wildlife diversity in in these WSAs is dependent upon the unique habitat of plateau vegetation and canyon vegetation intermixing. The diverse wildlife dependent upon this unique mix include California bighorn sheep, mule deer, pronghorn antelope, Canada geese and other water fowl, raptors and other birds, river otter, beaver, mountain lion and bobcat. Plateau vegetations include most notably low sagebrush species, big sagebrush, bunchgrass and antelope bitterbrush while canyon vegetation includes big sagebrush, Idaho fescue, bluebunch wheatgrass, rushes, sedges, juniper, willow, aspen and cottonwood. Eight endangered .0

plant species now live in the canyons. The DEIS acknowledges that the plateau vegetation beyond the canyon rim proximity is in poor condition, and, the extent to which some wilderness values such as wildlife habitat and natural vegetation stability would be foregone or adversely affected is directly correspondent to the degree of alternative development uses. We contend that the public interest is better served through the protection of wilderness values than through the advance of marginal development values. The economic values of enhancing wildlife, as found in studies completed by the Idaho Department of Fish & Game, are of increasing importance to the region's economic health. Yearlong range vegetation, especially for bighorn sheep, mule deer and pronghorn antelope, as well as crucial winter range vegetation, especially for migratory deer and eagles, are in direct competition in the desert environment with cattle forage developments. .05

8) The Owyhee Canyonlands complex, originally inventoried by the BLM at 1.9 million acres of roadless land in contiguous areas in Idaho, Oregon and Nevada, is now being considered by this DEIS as a mere 436,047 acres (23% of the contiguous roadless area). In light of the fact that the WSAs represent less than ¼ of what should have reasonably considered for wilderness, we believe that our recommendation of 1.2 million acres, or 60% of the original inventory, is balanced and serves both the conservation and development needs of our national interests. It is invalid to chop up this ecosystem by seperating the canyons and rim land from the remaining plateau lands without eventually having the wilderness values of the canyonlands irrovacably diminished. "Self-protection" is a mandated condition of wilderness designations and only with a comprehensive 1.2 acre designation would this be achieved.

9) The Owyhee Canyonlands, as a wilderness ecosystem, would provide unparalleled desert and canyon experience opportunities for the Boise metropolitan area population. Penetration into the wilderness from this center would take 2-5 hours and is not duplicated by any other equivalent environment in the region. There is no compelling evidence that anything other than a comprehensive wilderness designation would meet the Congressional mandate to "secure for the American people of the present and future generations the benefits of an enduring resource of wilderness."

10) An Owyhee Canyonlands wilderness designation of 1.2 million acres would provide much needed diversity within the National Wilderness Preservation System. Desert and canyon lands have always been considered wilderness worthy, yet little attention has been given them to date. The outstanding nature of these Owyhee lands is unique and makes even a bureaucratic statement such as this DEIS turn poetic. Current designated wilderness does not include any ecosystem representation like these, more specifically, there are no rhyolite canyonlands/sagebrush-bunch

grass ecosystem or sagebrush steppe ecosystem represented. Therefore, we believe the Owyhee Canyonlands possess unmatched value for NWPS diversity.

The spectacular scenic qualities and isolation of the canyons are dramatically matched by the vast grandeur of the plateaus. The wildlife habitat and scientific values of these lands are unique. Compromising the long-term benefits achievable only through wilderness designation of a comprehensive acreage in favor of development uses that would benefit only a few betrays prudent trusteeship. We believe that the owners, the American public, would chose to keep the Owyhee Canyonlands wild and natural.

Sincerely,

Tom Robinson

Tom Robinson, Director
Northern Rockies Region
The Wilderness Society

EXXON COMPANY, U.S.A.
POST OFFICE BOX 120 • DENVER, COLORADO 80201

EXPLORATION DEPARTMENT
WESTERN DIVISION
H.W. PRAETORIUS
MANAGER

May 23, 1984

Mr. Ted Milesnick
Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, ID 83705

Dear Mr. Milesnick:

Exxon Company, U.S.A. is pleased to have this opportunity to comment on the Owyhee Canyonlands Wilderness Draft Environmental Impact Statement. Exxon has a strong interest in the planning process for federal public lands, because it believes these areas have definite potential for the discovery of significant oil and gas reserves. Therefore, Exxon wishes to submit the following comments concerning the regional geology of the Owyhee Canyonlands and our conclusion that a moderate to high potential exists for the occurrence of hydrocarbons in and near the proposed wilderness area. .01

The area described by the Draft Environmental Impact Statement is located in the central and northern portion of a large geological feature known as the Juniper/Owyhee Basin. Geological and geophysical evidence suggests hydrocarbon prone sedimentary rocks may lay concealed beneath the basin's surface cover of basalt flows and volcanic debris. Although this basin and this concept have yet to be tested by exploratory drilling, oil-rich source rocks of Eocene Age are widely exposed along the basin's upturned southern margin. In our view, these prospective sediments appear geologically analogous to the producing oil plays of the Uinta Basin and are interpreted to be present throughout the Owyhee Basin area. Chances of adequate hydrocarbon generation, reservoir occurrence, and trapping are assessed as favorable; however, an extensive seismic effort will likely be required to substantiate their presence beneath the volcanics. Exxon is currently shooting a geophysical program of this type in the southern portion of the basin. It anticipates that a similar exploration approach would be required to evaluate the assessed petroleum potential underlying the Owyhee Canyonlands Wilderness Study Area.

A DIVISION OF EXXON CORPORATION

In summary, prospects for the existence of hydrocarbon reserves in the Owyhee Canyonlands are encouraging but their presence has yet to be proved. Since lands designated or recommended for designation as wilderness are effectively closed to energy and minerals exploration, the opportunity to conclusively determine whether hydrocarbon reserves are present is lost. Therefore, Exxon firmly believes that the amount of land recommended for wilderness should be held to a practical minimum. In this regard the Canyonlands Wilderness Alternative offers a reasonable compromise between protection of important wilderness features and access for minerals and energy exploration. Exxon strongly recommends this alternative to the Bureau.

We will be pleased to discuss further our views on the geology and hydrocarbon potential of the Owyhee Canyonlands. Please feel free to contact Mr. Fernando Blackgoat of our staff on 303/789-7488.

Sincerely,

H. W. Praetorius

HWP:bem

May 30, 1984

Golden Eagle Audubon Society
3015 Silver
Boise, Idaho 83703

Mr. Joe Zimmer
Boise District Manager, BLM
3948 Development Avenue
Boise, Idaho 83705

304

Dear Mr. Zimmer:

The Golden Eagle Chapter of the National Audubon Society has reviewed the Draft Environmental Impact Statement for the proposed Owyhee Canyonlands Wilderness. The Golden Eagle Chapter has over 400 members in southwest Idaho. We recommend that the 436,047 acre All Wilderness Alternative be selected rather than the preferred alternative which includes 382,510 acres. We make this recommendation because the All Wilderness Alternative best provides for the needs of the unique wildlife species which occupy the area. The other alternatives fall short in this regard by not including certain drainages and valuable plateau areas between drainages. We further support the 1.2 million acre comprehensive Owyhee Canyonlands Wilderness proposed by the Committee for Idaho's High Desert and other conservation groups.

Several specific items deserve comment. We urge the BLM to include the 28,000 acre parcel in the southeastern part of the Owyhee River Canyon WSA (OR 3-195) in Oregon in their wilderness recommendation. This area includes valuable antelope and bighorn sheep foraging areas as well as other wildlife habitat. Inclusion of this area would also prevent disruptive mining activity within the middle of the canyonlands wilderness.

We would encourage the BLM to recommend for wilderness the 3440 acre area in the southern portion of Idaho's Battle Creek - Deep Creek WSA (16-49A). This area has been proposed for non-wilderness status. The high watershed and ecological valves of this area warrant its inclusion as wilderness. The 8350 acreas of canyon and plateau on the South Fork of the Owyhee River in Nevada (Nevada Owyhee Canyon WSA) should also be incorporated into the wilderness recommendations. The area has a high density of nesting raptors and contains important bighorn sheep habitat.

Mr. Joe Zimmer
Page 2
May 30, 1984

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Finally, we urge the BLM to close as many roads as possible, including so-called cherry stem roads. This action will minimize human disturbance to sensitive species such as bighorn sheep and nesting raptors and will make the entire area easier to manage.

We appreciate the opportunity to comment on this Draft EIS.

Sincerely yours,

C. Blair for

Erwin Sonnenberg
President, Golden Eagle
Audubon Society

ES:gb

GOLD FIELDS MINING CORPORATION
A Consolidated Gold Fields Group Company

Please reply to the address indicated.
200 Union Boulevard - Suite 500
Lakewood, Colorado 80228
Telephone (303) 988-0360/ Telex 45-653

Telecopier (303) 989-6786

230 Park Avenue
New York, New York 10169
Telephone (212) 880-5250/ Telex 14-7219

Telecopier (212) 880-5191

305

May 30, 1984

Ted Milesnick, Team Leader
Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Re: COMMENTS ON OWYHEE CANYONLANDS WILDERNESS DRAFT ENVIRONMENTAL IMPACT STATEMENT

Dear Mr. Milesnick:

In reading and evaluating the five alternatives for the eight Wilderness Study Areas in the Owyhee Canyonlands, I find that generally fair and careful consideration has been given to most of the issues related to the Draft EIS. Although I do not agree with the BLM's Proposed Action (All Manageable Wilderness Alternative), the need for the protection of critical environmental values has been demonstrated. However, these critical environmental values can be adequately protected under two of the other alternatives, each of which allow reasonable mineral entry.

Gold Fields Mining Corporation and several other major and junior precious metal companies are conducting reconnaissance exploration programs in the Jordan Valley/DeLamar and Grasmere/Mountain City areas. The hot springs gold-silver potential in these areas is rated high by the mining industry. The DeLamar Mine, located about 30 to 50 miles east-northeast of the Owyhee River Canyon WSA, is a major silver-gold resource. Several mercury-gold shows are located between Rome and Jordan Valley, Oregon. Copper, lead and zinc shows, as well as several smaller gold-silver shows are present in and around the Duck Valley Indian Reservation, especially in the Mountain City/Jarbidge area. .01

Gold Fields and, to the best of my knowledge, our competitors are conducting their exploration programs with a minimum impact on the environment. This is done for two very practical reasons: 1) we all are required to do so by law; 2) each company does not want to leave tracks for their competitors. Mineral entry, exploration and later development can be accomplished with very little impact on wildlife habitats, water quality and scenic values. I have seen areas in Alaska more adversely impacted by wilderness campers and hikers than by a helicopter supported drilling program.

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Ted Milesnick
Comments/Owyhee Canyonlands Wilderness Draft EIS
May 30, 1984
Page two

The five alternatives are listed below in their order of acceptability to the mining industry:

I. No Wilderness/No Action Alternative (mining industry preferred alternative)

A total of 287,000 acres of Canyonlands would be managed under ACEC (199,000 acres) and HMA (88,000 acres) designation. Technically, mineral entry is possible in these areas; however, once an area has been designated an ACEC or HMA, it is virtually impossible to receive clearance for an exploration drilling program in either of these areas.

II. Canyonlands Wilderness Alternative

Wilderness designation would be restricted to 87,000 acres within the canyons and about 202,000 acres would be designated ACEC/HMA. The alternative is a fair and realistic consideration of the best multiple use for all the natural resources of the Canyonlands.

III. Wildlife Wilderness Alternative

IV. Proposed Action - All Manageable Wilderness Alternative

V. All Wilderness Alternative (least acceptable alternative)

As I mentioned earlier most of the issues related to the DEIS were given fair consideration; however, the Minerals and Energy sections in Chapters II and IV are barely adequate. In order for the public to intelligently comment on complex natural resource issues, all the facts should be fully presented. The Canyonlands are a public natural resource, as are the minerals, oil and gas located on Federal land. The protection of one and the development of the other are both in the national interest and both can be done compatibly.

Thank you for your consideration of these comments. I trust the concerns of the minerals and energy industries will be given full consideration in reaching a decision.

Sincerely,

Rick H. Russell

Rick H. Russell
Exploration Manager
Rocky Mountain/Southwest Region

RHR:br
cc: John Wells - MEC

COMMITTEE FOR IDAHO'S
HIGH DESERT
P.O. BOX 463 BOISE, IDAHO 83701

May 29, 1984

Mr. Joe Zimmer,
District Manager
Boise District Office
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

306

Dear Joe:

The Committee for Idaho's High Desert is a statewide, grassroots organization dedicated to protecting Idaho's outstanding desert lands, waters, and resources. Members of the Committee make extensive use of Idaho's high desert - including the lands of the Owyhee Canyonlands - for hiking, hunting, fishing, horseback riding, photography, scientific study, and other uses. On behalf of the Commitee and its members statewide, I would like to submit the following comments on the Draft Owyhee Canyonlands Wilderness EIS.

GENERAL COMMENTS

The Owyhee Canyonlands are one of America's most spectacular wilderness areas. The plateaus and canyons of the Owyhee Plateau offer outstanding scenery and recreation, high wildlife values, and other valuable resources. The vastness and grandeur of the Canyonlands make this one of America's premier wilderness areas.

We are pleased that the BLM is now studying part of the canyonlands roadless area for possible wilderness protection. We believe that wilderness deesignation is the only long-term means of protecting the recreation, wildlife, and other values of the Canyonlands, and keeping the land the way it is today.

We commend the BLM for a well-written and easily understandable DEIS. The document displays a sensitivity for the high desert and for wilderness that is rare in BLM studies. We believe your staff is to be commended for a high-quality document. We have serious concerns, however, about the recommendations and some specific points covered in the DEIS.

As mentioned earlier, the roadless complex in the upper Owyhee River basin is vast, covering well over 2 million acres. The BLM is studying only a portion of this for possible wilderness protection, and is doing so in a piecemeal manner. The 622,000 acres of Wilderness Study Area in the upper Owyhee basin are being considered in four separate wilderness studies - the Owyee, Owyhee Canyonlands, Jacks Creek, and Oregon

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Statewide Wilderness EISs. Over a quarter million acres of Wilderness Inventory Unit lands are still under appeal to the Interior Board of Land Appeals, and other high-quality roadless lands were eliminated from further wilderness study.

The Committee for Idaho's High Desert has chosen to look at all the roadless land of the upper Owyhee River basin at one time. After carefully studying the recreation, wildlife, watershed, cultural, and other resources of the roadless area, we are recommending that 1.2 million acres be protected in an Owyhee Canyonlands Wilderness. .01

We request that BLM give serious consideration to this proposal. We believe it is a feasible proposal which could be implemented with minimal impact on the regional economy and substantial long-term benefits to the American public.

We are enclosing a copy of the Owyhee Canyonlands issue of Desert Notes, the Committee for Idaho's High Desert (CIHD) quarterly newsletter. The newsletter explains in more detail our Owyhee Canyonlands Wilderness proposal, how it was developed, and what the resource values of the area are. We would like to specifically request that the chart on page 8, the acreage breakdown for the Canyonlands proposal, be included in the FEIS.

We would like to point out that although CIHD took the lead in developing the Conservationist's Owyhee Canyonlands Wilderness proposal, we had extensive input from other organizations and individuals in Idaho, Oregon, and Nevada. To date, the proposal has been endorsed by 32 organizations in the three-state region (see attachment).

We recognize that it is unlikely BLM will be able to analyze the full 1.2 million-acre proposal in the FEIS. We do request that BLM include a map and brief description of the proposal in the FEIS, highlighting those parts of the proposal which are included within the eight WSAs included in the Canyonlands EIS. We urge BLM to recommend as wilderness 430,000 acres in these WSAs, in what we are calling the "Conservationist's Modified All-Wilderness Alternative" for the Owyhee Canyonlands Wilderness EIS. This alternative concurs with the BLM boundary recommendations for the southern portion of WSA ID-16-53/NV-010-103A (the El Paso Natural Gas pipeline crossing of the South Fork of the Owyhee), the northern tip of WSA OR-3-195, and the deletion recommended in WSA 16-49D; we also support the additions proposed in the All-Manageable Alternative. Other than these boundary changes, we support the All-Wilderness alternative.

We also request that the final BLM wilderness proposal recommend an exchange of 30,000 acres of State of Oregon land along the Owyhee River for BLM lands outside the Conyonlands Wilderness. (This is also part of the Conservationist's .02

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Modified All-Wilderness Alternative, which brings the total acreage of this alternative to 460,000 acres.) We believe such an exchange is necessary to protect the integrity of the Canyonlands wilderness. These lands - which include one or both sides of the Owyhee River canyon adjacent to WSA OR-3-195 - are managed as endowment lands for the State, meaning that they will be managed for highest economic return. We believe this poses both short-term and long-term threats to the Canyonlands. The short-term threat is competition between recently reintroduced California bighorn sheep (and other wildlife) and domestic cattle; if direct economic return to the State is the criteria for deciding land use, we fear that the bighorn may lose out. We are therefore proposing that all land a mile and a half back from the canyon rim be exchanged with BLM, where multiple-use mandates and wilderness management objectives would ensure wildlife an adequate food supply. .02

A long-term threat we see to to Canyonlands wilderness if the State lands are not exchanged is mining. This area is on the edge of a region now being considered by the US Geological Survey as a possible candidate for low grade, high volume strip mining operations for gold and silver. Such operations could have devastating effects for the Owyhee River ecosystem, and create tremendous management difficulties if they take place on the wilderness boundary or within the river corridor. We believe the elimination of this threat is in the best interest of both Owyhee River and Canyonlands Wilderness management and all the resources of the area. We also believe the threat of such an operation within the Canyonlands should be included in the text of the FEIS.

SPECIFIC COMMENTS

1. Alternatives Considered.

We believe the BLM has presented a reasonable range of alternatives, one which meets the requirements of the California vs. Block decision. We also believe the logic behind each alternative is sound. We do have some major concerns about the alternatives as presented, which are outlined below.

The Wildlife Wilderness Alternative name, in our opinion, is a misnomer. Despite the additional acreage recommended for this alternative by the Idaho Department of Fish and Game, this is almost exclusively a California bighorn sheep alternative. The alternative protects only the habitat required for bighorn and other canyon-dependent wildlife, while omitting key areas for other wildlife species such as antelope, mule deer, and sage grouse. .03

We recommend that this alternative be renamed the Canyon Wildlife Alternative or returned to its original Bighorn Sheep Alternative name. The name "Wildlife Alternative" implies that it protects all or most wildlife habitat within the WSA

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complex, when in fact it is based entirely on those species dependent on the canyons and the plateau lands immediately adjacent to them.

Our second major problem with the DEIS Wilderness Alternatives relates to the All-Wilderness Alternative. We believe an unreasonable amount of artificial restriction has been placed on this alternative, which defeats the intent of such an alternative. We find it ludicrous that WSA additions, closure of roads, and aquisition of private and State lands (or development rights for those lands) are considered and recommended as part of the All-Manageable Alternative, but NOT considered as part of the All-Wilderness Alternative. We believe this defeats the very purpose of the All-Wilderness alternative, which is to maximize the protection of lands and resources through wilderness designation and provide a baseline by which to evaluate other alternatives. We consider this a major flaw in the DEIS, particularly because the conclusion a reader gets from the DEIS is that the All-Wilderness alternative would be less effective in protecting wilderness values (because of management problems related to open roads and unprotected inholdings) than the All-Manageable alternative. While this may be technically correct, we do not believe it conforms with the spirit of the law. .04

We urge BLM to modify the All-Wilderness alternative in the FEIS, allowing road closures and exchange or acquisition of inholdings (or the development rights for these inholdings) where these would enhance wilderness management and resource protection. If necessary, we recommend that a subsection of the All Wilderness Alternative, entitled the Enhanced Wilderness Alternative, be examined. We believe this would better reflect the spirit of this alternative, and better display actual resource protection and management opportunities, than the current DEIS.

2. Split Estate Lands

On December 30, 1982 Secretary of Interior James Watt issued a decision that all split estate lands - those lands where the surface rights are held by the BLM but the mineral rights are held by the State - would be removed from further wilderness consideration. This decision eliminated 10,020 acres from the Owyhee River Canyon WSA (OR-3-195) in Oregon, in a checkerboard pattern across the WSA. At present there are no known mineral values in these lands. However, these lands would still be open to mineral entry and mining in the future, which would have serious consequences for the management and resources of the surrounding wilderness land. .05

Secretary Watt's decision was taken to Court by a number of conservation organizations, and it appears likely that a ruling on the legality of Watt's action will come soon. If the split estate lands are returned to wilderness study status (which we

consider a likely possibility), we would like to see BLM automatically recommend Wilderness designation for those split estate lands within the wilderness boundaries recommended in the Proposed Action. This would logical and cost-effective way of meeting the NEPA and FLPMA requirements for wilderness study of these lands, and would eliminate the need for a separate wilderness EA or EIS for these lands, which are identical to and integrated with lands already being considered as part of the Owyhee Canyonlands EIS. .05

3. Boundary Modifications in the Proposed Action

Our last major disagreement with the DEIS is with the final boundaries recommended in the Proposed Action. Although this is one of the most important sections of the DEIS, it is given a single Table. There is no discussion of the resource values lost in each eliminated parcel, nor is there a clear rationale for doing so in many cases. This is particularly true where extensive acreage was eliminated from the final wilderness recommendation in order to remove a small amount of undeveloped private land (as has happened in the southwest tip of WSA OR-3-195).

We have serious concerns about the decision to eliminate WSA lands from wilderness protection for "manageability" reasons. These lands meet the legal definition of wilderness; if current management is allowing these characteristics to exist, we see no reason why such a condition can not be assumed to continue.

We understand that the Oregon Stata BLM office has recently issued a Memorandum regarding the assessment of manageability of WSA lands. We request that this Memorandum be used in seriously reevaluating all those lands within the Owyhee Canyonlands proposed for deletion, and the appropriate adjustments made to restore lands which are not clearly and obviously unmanageable. .06

There are a number of specific areas proposed as unsuitable for wilderness which we would like restored to the wilderness recommendation. These areas, and our reasons for including them, are listed below.

Additions to OR-3-195, East side (3400 acres)

This area is one which we recommended for WSA status during the Stateline inventory comment period, and is an area CIHD currently has in Appeal before the Interior Board of Land Appeals (IBLA) in Washington, D.C. The BLM initially proposed this for WSA status, and then removed it after the public comment period due to input from a local rancher. He contended that the area was unnatural due to crested wheatgrass seedings. There was an aerial brush control project in the area in 1961, followed by an aerial seeding in 1964. Neither was particularly successful, and in the last 20 years the area has returned to what we consider a substantially natural condition.

native plant communities (BLM should contact the Oregon Natural Heritage Program for more information and documentation of these values, or for a source of more information on these values). The proposed BLM boundary would cut out the scenic Toppin Creek canyon. It would release to possible future development an area identified by the Oregon Department of Geology and Mining Industries (DOGAMI) as having moderate potential for tin, lead, uranium, and other minerals. It would also create severe management problems if CIHD is successful in its appeal of the Lookout Butte Intensive Inventory Unit, and it is returned to wilderness study. (We consider this a strong possibility since the area was recommended as a WSA by both the Boise and Vale Districts, but overturned by the State Directors with no clear explanation or rationale. The fact that our case has been before IBLA for almost two years is encouraging to us).

We simply do not see adequate justification within the DEIS of the need to eliminate this area, and what specific management concerns are. How does the density of range improvements within this area compare to other WSAs in the Canyonlands, and WSAs outside the canyonlands? What are the specific resource values that could be lost in this unit, particularly opportunities for establishing Research Natural Areas or other areas for scientific study? There is too little data supporting the proposed BLM action, and substantial justification for including these lands in the Owyhee Canyonlands wilderness. Unfortunately, it appears that BLM is continuing to eliminate relatively flat plateau lands from its wilderness recommendations in favor of canyons and other more rugged terrain, and this appears to be a continuation of this trend.

OR-3-195, Southwest Tip (approximately 3800 acres)

We believe that BLM has misrepresented this in the draft Owyhee Canyonlands EIS. There is a pipeline in the unit (the 1 1/2 mile east-west line in the upper 40% of the unit) and three 40-acre private inholdings along the northeastern border of the proposed deletion; however, even if these were completely excluded from the recommended wilderness and not cherrystemmed in, only half of the proposed deletion would need to be removed. Contrary to the DEIS statement, only 1/2 mile of the 5 mile boundary for the proposed deletion is private land; the rest is perfectly sound BLM land. The proposed deletion would eliminate the upper portion of Dry Canyon, a tributary of the Upper West Little Owyhee and an area with high wildlife values. BLM is proposing to eliminate 3800 acres for potential problems on less than 150; given the recreation and other resource values of this area (and the importance of protecting more than a rim-to-rim Upper West Little Owyhee) we cannot agree with the BLM decision. We have included it in our proposal, with a cherrystem along the pipeline and acquisition, or trade, of the private land or its development rights.

In examining the Vale District files, all we could find for documentation of the revised decision was the change of the phrase describing the seeding from "substantially unnoticeable" to "substantially noticeable" in the final decision. We could not locate any photos or site information to suggest that BLM had actually done additional field work in the area after receiving the protesting comment.

We support the BLM proposal to include 1,448 acres of this unit in the final Owyhee Canyonlands wilderness recommendation, because of its value for management and as bighorn sheep habitat. We contend that if BLM believes this part of the 3,400 acres has sufficient naturalness and resource value to be classified as wilderness, the remaining acreage does, as well.

OR -3-195, Southeast Portion (Toppin Creek Drainage) (approximately 34,600 acres)

This is the major deletion BLM is proposing for the WSA in its wilderness recommendation. In the Owyhee Canyonlands DEIS BLM says this area is isolated from the remainder of the unit by a cherrystem road, and that the concentration of ways and stock ponds have a significant local impact on naturalness and make it difficult to manage this area for solitude and primitive recreation. Management would be difficult due to the need to provide continued access to these range improvements. BLM is using the cherrystem road along the west and split estate lands along the north to define the boundaries of the proposed deletion.

We are proposing that this area be included in wilderness. First, the area meets the naturalness criteria, and the density of range improvements is equal to that of other areas within the Canyonland WSAs which are being recommended for wilderness. So far as we can tell, there is very little public use of the cherrystem road being used as a boundary, so closing it off to everyone but ranchers would not have an adverse impact on recreational use and would allow the road to revert to a way, further decreasing its impact on naturalness.

The major reason we are recommending wilderness for this area is its resource value. Toppin Creek is a tributary of the Owyhee which is entirely within the WSA boundary, and has significant wilderness watershed values which could be reduced if the area is not given wilderness protection and is developed at a later date. The proposed BLM boundary would exclude bighorn sheep habitat, raptor nesting and feeding areas, and habitat for chukar, antelope, and other wildlife species. According to testimony presented by the Oregon Native Plant Society and the Portland Chapter of the Audubon Society, there may be rare plants in the watershed, as well as good examples of three currently unprotected good-quality

OR-3-195, West-central Portion (approximately 9600 acres)

BLM is proposing to eliminate this area because it would be difficult to manage for solitude and primitive recreation due to adjacent private property, major access roads and flat terrain. We believe these are weak arguments trying again to justify elimination of plateau lands from the final wilderness recommendation. Of the 19 miles of WSA boundary which would be eliminated by the proposed action, less than one borders private land; the rest adjoins public land. The private inholding BLM is concerned about is only 240 acres, with less than half of that area bordering the WSA (there are no private inholdings within the WSA area proposed for deletion). The proposed deletion would eliminate almost two miles of Antelope canyon, a scenic highlight of the area. We can see no justification for elimination of this area, and positive recreational and wildlife values for retaining it.

ID-16-49A (3,440 acres)

This is another plateau deletion that we beileve is not adequately justified. The area meets the legal definition of wilderness, and has high resource values (my personal recollection of the area is that much of was in relatively good ecological condition last autumn). Again, we consider retention of plateau lands to be an integral part of a viable Owyhee Canyonlands wilderness. We do not believe that the highly infrequent use the cherrystem roads may receive by local ranchers would substantially impact recreation or solitude, and believe that road closures (with only local ranchers allowed) would effectively reduce other possible intrusions on the wilderness experience. Again, we believe the balance falls on the side of wilderness protection.

We believe the proposed boundary will be much less manageable than the existing WSA boundary. Legal boundaries are generally poor delineators of wilderness on plateau lands, and the gently rolling terrain will make finding the watershed boundary almost impossible to find on the ground. We ask instead that BLM move the wilderness boundary south to the bladed fenceline, incorporating non-inventory lands originally recommended by BLM for WSA status. These lands meet the mandatory wilderness characteristics, and the bladed fenceline would serve as a logical, easily visible wilderness boundary.

ID-16-52 (1,820 acres)

We find the rationale for eliminating this area very weak. The influence of the metal building adjacent to the northern boundary is minimal, and is subordinated by the surrounding

natural landscape. We believe this is an example of overly pure application of the "outside sights and sounds" criteria, and completely unnecessary and unwarranted.

The boundary proposed for this deletion makes no sense. It does not follow the "line of sight" for the building, but instead eliminates land far from the facility while retaining land from which it is visible. This area has high wildlife value and is the most readily accessible part of the Owyhee River from metro Boise. We urge you to include this area in your final wilderness recommendation.

ID-16-53 (1,400 acres)

This is another example of excessive application of the "outside sights and sounds" criteria. The visual impact of adjacent roads and livestock developments is subordinate to the vastness of the landscape, and not offensive to the wilderness visitor (who expects such developments outside the wilderness area). There is a "Catch-22" logic here; an area does not qualify for wilderness because of the development adjacent to it, and is hence classified as non-wilderness; yet BLM is prOhibited from managing lands surrounding wilderness areas as buffer zones, which could allow high-impact development on these released WSA lands, further impacting and reducing the value of adjacent wilderness lands. We see this as a losing game for wilderness and the resources dependent on it, and strongly disagree with the application of "sights and sounds" criteria in this WSA. We also disagree with BLM's contention that rehabilitation of cherrystem roads would not be possible because they service stock ponds. We believe that road closures, which would allow only the local permittee to the ponds, would allow the road to revert to a way, reducing its impact on wilderness values.

NV-010-106 (8,350 acres)

This is another deletion which we strongly disagree with. BLM has identified substantial resource values in the WSA, designating all the canyon area as an Area of Critical Environmental Concern. The southern half of the WSA has outstanding values for recreation, wildlife and scientific study. BLM is recommending non-wilderness for this area primarily to guarantee the possibility of improved future road access to the river.

The DEIS fails completely to justify the deletion of over 8,000 acres in this WSA. There is no discussion of allowing a 100-foot road corridor through wilderness to the river, with restrictions on construction to ensure it blends into the landscape as much as possible, or any other alternative which would allow future access while still protecting the wilderness values of the southern half of the WSA. Nor is there any justification for why the access road is even needed, given .07

existing access at the Petan Ranch upstream of the WSA.

The FEIS needs to clearly document the need for additional access to the South Fork, and why such access cannot be provided while still protecting the southern half of the WSA as wilderness (even if it requires creating a separate 8,000 acre wilderness). This area has very high wilderness values, which need long-term protection. While ACEC may protect some of the resource values of the WSA, it will not protect the area from mining or small hydro development, nor will it protect the plateau land. We urge you to recommend this area for wilderness in the final EIS.

DETAILED COMMENTS ON SPECIFIC POINTS IN THE DEIS

TABLE II-7, Pages II-14 - II-19: Wildlife -
We disagree with the BLM contention that there will be no significant differences between alternatives. This may be true for bighorn sheep, if the ACEC/HMA is successful in preventing major development; however, this is an administrative designation which could be changed at any time, and will not prevent mining or other major development. The table ignores antelope, sage grouse, and other wildlife species which could be substantially impacted through range development projects in unprotected areas (particularly seedings to exotic species). The FEIS needs to include a more accurate assessment of wildlife impacts of the various alternatives. .08

Scenic Quality - The same comments apply. VRM designations can be changed at any time, and do not prevent major developments as wilderness designation does.

Little Owyhee River WSA description, page III-4 and elsewhere:
We do not believe the BLM description of the scenic and other values of the Little Owyhee River WSA (ID-16-48C) do justice to the area. The WSA has dramatic cliffs, up to 800 feet high, vast plateau lands, and other outstanding scenic and recreational values. We urge BLM to rewrite their description of this unit, which we do not believe differs substantially from other WSAs in the Canyonlands. .09

Vegetation, page III-6; also, Ecological Values, page V-3:
At the Portland hearing, the Oregon Native Plant Society suggested that an additional 10 rare plant species might be found on the plateaus of the Owyhee Canyonlands. We urge BLM to examine this information and include the results in the FEIS. .10

Water, page III-14:
The DEIS adequately assesses the possibility of major dam construction on the Owyhee River (although listing the site locations may be useful); however, it does not address potential small hydro sites on tributaries within the Canyonlands. We know that at least one site has been identified .11

in Red Canyon; we believe that the FEIS should list any additional sites on the Owyhee or its tributaries within the Canyonlands. FERC and the US Army Corps of Engineers (who completed a study of 600 potential hydro sites in the Northwest in 1982) would likely be able to provide this information. .11

Economics, page III-20; also, Recreation, page IV-22:
There is no discussion in the DEIS of how the economic value of hunting and other recreational uses of the Canyonlands were determined, which makes it difficult to evaluate the economic benefits of wilderness designation. The Idaho Department of Fish and Game, in conjunction with BLM and other agencies, has recently completed a study which assigns a specific economic value to fish and wildlife resources, one which looks like it would be substantially higher than that used in the DEIS. We request that these figures be used in the FEIS, and that the FEIS include a summary or appendix explaining how the economic benefits of wilderness were calculated. .12

Plateau Lands, page IV-2:
Mining could be a threat to non-designated plateau lands, particularly in the Toppin Creek area. This should be mentioned in the FEIS. .13

All-Wilderness Alternative, page IV-5:
As discussed above, the All-Wilderness alternative should also be a manageable alternative which includes closure of roads and exchange of State or private lands where necessary. Please refer to our earlier comments. .14

Recreation, page IV-10:
Under the All Manageable Wilderness Alternative, there is a statement that closure of vehicle use would restrict hunting use, but would improve opportunities to experience solitude. Closure of roads and ways and protection of the area from disruption should improve wildlife populations as well, presumably leading to increased hunter success. This possibility should be considered in the FEIS. .15

Diversity in the National Wilderness System, page V-4:
The fact that Forest Service areas previously recommended for Wilderness are no longer recommended needs to be stressed, and the recommended acreage figures should probably be eliminated (as they have been from the BLM Wilderness Status maps). It would also be useful to summarize the amount of sagebrush steppe BLM has recommended for wilderness out of the total WSA study acreage in this ecosystem. This reduced figure will give a better representation of what may actually be protected than simple WSA acreage. .16

Thank you for the opportunity to comment on this important Wilderness EIS. We ask that these comments be made part of the

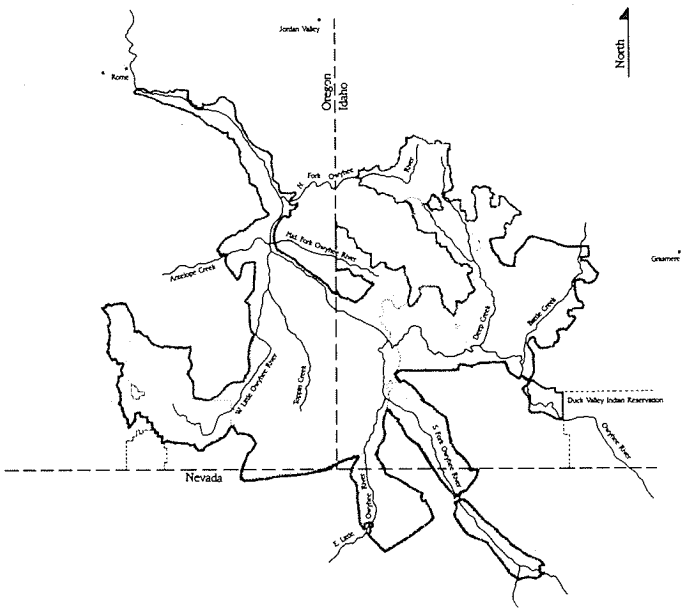
official comment record for the Owyhee Canyonlands EIS. If you would like clarification or additional information on any of the points raised above, please let us know.

Sincerely,

Bruce R. Boccard

Bruce R. Boccard,
Executive Director

Owyhee Canyonlands Wilderness



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CIHD Proposed Wilderness

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Mr. Joe Zimmer
May 26, 1984
Page 2

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would greatly simplify the task, therefore saving taxpayers money, in addition to keeping the ecosystem in tact for the benefit of the wildlife and recreationist.

Thank you for considering our opinion.

Sincerely,

James Pacholke
Wilderness Chairperson

Panhandle Environmental League

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Chapter of the Idaho Conservation League
P.O. Box 963, Sandpoint, Idaho 83864

May 26, 1984

Mr. Joe Zimmer
District Manager
Boise District BLM
3948 Development Way
Boise, ID 83705

Dear Mr. Zimmer:

Our organization represents 150 members. The following represent our collective opinion on the Owyhee Canyonlands EIS.

We believe the Owyhee Canyonlands to represent a very excellent wilderness area that supports a great variety of wildlife. Because the area supports bighorn sheep, mule deer, antelope and other animals; contains ungrazed areas of rare grasses and other plants; and has a great variety of recreational experiences, we support the Committee for Idaho's High Desert proposal for the modified All Wilderness Alternative for the Owyhee Canyonlands EIS. We support the BLM State of Oregon land exchange along the Owyhee River, in order to include the canyon and bighorn sheep habitat in Wilderness.

We recommend that the 28,000 acre area in the southeastern part of the Owyhee River Canyon WSA in Oregon be included in the Wilderness recommendation.

We recommend that the 3,440 acre reduction proposal for the southern portion of Idaho's Battle Creek-Deep Creek WSA be included in the Wilderness area.

We further ask the BLM to include the southern 8,350 acres of Nevada's Owyhee Canyonland WSA in the Wilderness proposal with provisions for a 100 foot wide road corridor to the private property along the river.

Finally we support the 1.2 million acre comprehensive Owyhee Canyonlands Wilderness proposed by the Committee for Idaho's High Desert. We feel that management of this area as a unit

Defenders OF WILDLIFE

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May 29, 1984

Joe Zimmer, District Manager
Boise District
U.S. Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

Defenders of Wildlife submits this letter as our comments and recommendations on your Draft Environmental Impact Statement concerning preliminary wilderness recommendations for eight Wilderness Study Areas along the Owyhee River, where the states of Oregon, Idaho and Nevada join (Federal Register Notice, February 24, 1984; page 7002).

We strongly support and urge you to fully implement the modified "All Wilderness Alternative" (460,000 acres), as proposed by the Committee for Idaho's High Desert and other conservation groups. We believe this modified "All Wilderness Alternative" will provide reasonable and necessary protection for the diverse and abundant wildlife populations in this region. Indeed, this is the only alternative which protects not only bighorn sheep and canyon-dependent wildlife, but also mule deer, antelope, sage grouse, and other plateau wildlife. In addition, this alternative may benefit eight plant species which may be proposed for threatened or endangered listing.

We recommend that a number of changes be made in this DEIS for the Owyhee Canyonlands.

First, we recommend that BLM support the State of Oregon land exchange along the Owyhee River. This exchange would include important bighorn sheep habitat within the wilderness. .01

Second, BLM should close as many roads as possible within these wilderness areas to protect wildlife and other natural values.

Third, we disagree with the BLM recommendation of non-wilderness for the 28,000-acre area in the southeastern part of the Owyhee River Canyon WSA (OR 3-195) in Oregon. This 28,000-acre area should be included in the Wilderness recommendation to protect antelope and bighorn sheep forage areas, and other natural values. This wilderness acreage would also prevent developers within the "heart" of the Canyonlands wilderness.

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Fourth, we also request that the 3,440-acre reduction proposed for the southern portion of Idaho's Battle Creek-Deep Creek WSA (16-49A) be included in wilderness. This area has important ecological and watershed values. Management problems could be solved by closing the ways into the area to the general public.

Fifth, BLM should include the southern 8,350 acres of Nevada's Owyhee Canyon WSA in the Wilderness Proposal with provisions for a 100-foot-wide road corridor to the private property along the river. This compromise would protect bighorn sheep and other values while allowing BLM to provide any necessary river access. .02

As you know, the Owyhee Canyonlands may be the largest, contiguous, unprotected roadless area in the lower 48 states, consisting of up to 2,000,000 acres of pristine public lands. In general, Defenders of Wildlife strongly supports the 1.2 million-acre Owyhee Canyonlands Wilderness proposed by the Committee for Idaho's High Desert and other conservation groups.

Please support and work to implement this wilderness proposal.

We would appreciate being kept informed on BLM's decisions relating to wilderness proposals in the Owyhee Canyonlands. In addition, please include this letter in the hearing record, and reconcile our concerns in the final EIS.

Thank you very much for considering our views.

Sincerely,

Richard Spotts

Richard Spotts
California/Nevada Representative
Defenders of Wildlife

5604 Rosedale Way
Sacramento, CA 95822
Phone: (916) 442-6386

Dick Randall

Dick Randall
Great Basin Representative
Defenders of Wildlife

Box 507
Rock Springs, WY 82901

RS/js

cc: Mr. Rod Harris, Elko District Manager
Interested parties

LANE COUNTY AUDUBON SOCIETY

AN OREGON CHAPTER OF NATIONAL AUDUBON SOCIETY

P.O. BOX 5086 • EUGENE, OREGON 97405

May 27, 1984

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Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Dear Sirs:

The Lane County Audubon Society would like to take this opportunity to comment on the "Owyhee Canyonlands Wilderness-Draft Environmental Impact Statement."

We endorse the creation of the 436,047 acre "All Wilderness" alternative since we believe this alternative would best preserve a representative rhyolitic canyonlands/sagebrush-bunchgrass ecosystem. Preservation of both the canyonland and plateau vegetative communities is essential.

The Bureau of Land Management should make a concerted effort to preserve several large unmodified tracts of land of each representative landform and ecosystem. This is necessary since the size of an ecosystem directly effects plant and animal diversity and stability. Primitive recreational opportunities, historic and cultural preservation, scientific values and aesthetics are also enhanced by setting aside a larger wilderness area.

The "All Wilderness" alternative could be effectively managed, by the BLM, with several planning modifications. Additional cherry stem roads and ways could be closed, and off-road vehicle use can be restricted by fencing. This fencing could also help implement your grazing program. Other grazing and range improvements can be concentrated on the lands that were deleted from future wilderness consideration.

The Lane County Audubon Society believes that the added benefits of the "All Wilderness" alternative far outweighs any added costs to the BLM for road closures, added fencing, or grazing plan modification.

Thank you for this opportunity to comment.

Sincerely,

Sydney Herbert

Sydney Herbert
Conservation

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FRANCIS PEAK GEM AND MINERAL SOCIETY

Gentlemen,

In regards to the Owyhee Canyonlands wilderness proposal. I think at this time we have set aside enough land as wilderness. Although I do not live in the States of Idaho, Oregan or Nevada, I do go into the Owyhee area as a rock-hound and collect the beautiful picture rock that comes from that area. To designate any more of the land as wilderness is wrong and unnecessary.

Signed Joseph E. Odell

****

SHADYLAWN FARM

Route 1, Box 1199
Homedale, Idaho 83628
Telephone (208) 337-3917

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May 29, 1984

Supervisor
Boise District Office
Bureau of Land Management
Boise, Idaho 83702

Dear Sir:

In reference to the "Canyon Lands Wilderness" hearings, there seem to be some questions that need discussion and answers.

What does a "wilderness designation" of the Owyhee River Canyon mean to the people who have water rights on the water? This would, I am sure, prevent any further development of the river; but how would it affect the stream and its tributaries above the canyon area? Would it lock out others seeking to use Bureau land system in states south of us? .01

Will the "Wilderness designation" mean that only those able to hike in the area can see it unless they have the money to charter fly-in trips? If this is so, then would it not be better to keep the "Wilderness" area to a minimum along the canyon so that more might enjoy the larger area? .02

Since, according to the "Wilderness Bill" no more trails or roads can be built, is this even a good place for the average backwoodsman with his known hazards such as snakes, lack of good water, risk of getting lost, etc.? Are the four wheel drives and other unmanned motorcycles a threat to the area?

How much more grazing will be placed on the ranchers who graze cattle in the area? Will it allow of existing grazing rights have to stop within the "Wilderness designated" area?

Thank you for your attention to these questions.

Yours very truly,

Charles R. Fisher

Charles R. Fisher

May 31, 1984

1005 Fort Street
Boise, Idaho 83702

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Bureau of Land Management
Owyhee Canyonlands EIS
3849 Development Avenue
Boise, Idaho 83705

Re: Written Comment Favoring Wilderness

At the present time, there are no canyon/sagebrush - bunchgrass ecosystems represented in the National Wilderness Preservation System. The Owyhee Canyonlands offer a unique opportunity to add another ecosystem to the NWPS.

Most persons would agree the canyon itself is spectacular and will receive some form of protection, but the real issue is how much of the plateaus will be preserved. The chief use of the plateaus contemplated by the EIS is for livestock grazing. Yet, even the All Wilderness alternative allows a 19% increase in grazing over present levels.

When one considers the fact that less than 1% of the Owyhee ecosystem is in good to excellent condition (per Bruneau-Kuna grazing EIS), what possible justification can there be for allowing more of the same activity which has reduced the condition of the other 99% of the range? At some point, we must preserve the ecological values unique to the Owyhee area, if only for scientific and comparative purposes.

The chart at page II-18 is particularly alarming because it shows clearly that any choice short of the All Wilderness alternative will result in a tremendous loss of topsoil. Yet, that same chart shows at II-19 that there is no appreciable economic cost under the All Wilderness alternative. If the BLM is serious about conscientious management of public resources, how can it justify electing alternatives which show only marginal economic benefits and subject large acreages to erosion?

In terms of an overall wilderness/management strategy, I personally prefer the All Wilderness alternative for wildlife preservation and enhancement. I think it would be appropriate to consider the possibility that wildlife values may exceed any benefit from increased livestock grazing. Certainly, the preliminary findings of the studies now underway with the Idaho Department of Fish and Game suggest we have grossly .01

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underestimated the value of our wildlife resource. Why not include this information and an economic analysis of this comparison in the final draft? .01

Thank you for this opportunity to comment.

Sincerely,

Ted Weigold

Ted Weigold

338

Kent Coe
1012 13th
La Grande, OR 97850

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

May 30, 1984

Dear BLM,

I strongly support wilderness designation for all of the upper Owyhee Canyonlands areas that have been identified by the BLM as WSA's. I also support wilderness designation of those lands that the BLM dismissed as suitable for wilderness during your preliminary studies.

Your main reason for elminating the contiguous roadless areas from wilderness study was due to what you said was a lack of outstanding solitude. The areas are generally flat to rolling terrain of sagebrush. But if you added all those areas into one large wilderness, and closed a few roads there would be ample opportunity for outstanding solitude.

I support 1,267,000 acres of wilderness in the Owyhee Canyonlands area in Oregon, 1,176,000 acres in Idaho and 991,000 acres in Nevada. These acreage figures include all of your proposed areas and the areas that were eliminated by the BLM from wilderness study. The total area would be 3,434,000 acres of recommended wilderness.

The EIS is supposed to, by law, have a wide range of alternatives in it. Yet the Owyhee EIS only has five alternatives which go from 0 acres to 436,047 acres. I don't consider this a very wide range of alternatives. When a moderate conservation organization like the Committee for Idaho's High Desert comes out supporting 1.2 million acres for wilderness then I know all your alternatives are sided towards development and away from resource protection. .01

Please consider the 3,434,000 acre Earth First! wilderness proposal. Thanks.

Sincerely,

Kent Coe

May 31, 1984

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Martin J. Zimmer
District Manager
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

This is the Idaho Conservation League's public statement on the Draft Environmental Impact Statement (EIS) prepared by the Bureau of Land Management (BLM) on the proposed Owyhee Canyonlands Wilderness. Of the five land management alternatives discussed in the Draft EIS, we support the All Wilderness designation of 436,047 acres.

We commend the BLM for its recognition of the high wilderness values contained in this unique high desert country. There are very few wild lands in the United States which can match the Owyhee Canyonlands' combination of wildlife diversity, recreational opportunities for hiking, whitewater boating and rafting, and splendid natural scenery.

In addition to our review of the Draft EIS, we have studied the comprehensive wilderness plan proposed by the Committee for Idaho's High Desert (CIHD), under which approximately 1.2 million acres in Idaho, Oregon and Nevada would be designated as wilderness. Because we believe that the Owyhee Canyonlands provides one of the most outstanding remaining opportunities to preserve wilderness in the United States, we earnestly endorse CIHD's proposal. We support CIHD's recommendation as an alternative to the All Wilderness proposal because we feel that it will provide substantially better protection for the Owyhee Canyonlands.

The main difference between the BLM All Wilderness alternative and CIHD's proposal is that the latter protects a much greater portion of the high plateaus which lie between the river canyons.

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While there is no doubt that the canyons of the main branches of the Owyhee River, as well as such tributaries as Deep Creek and Battle Creek, have extremely high wildlife and scenic values, the plateaus comprise an equally important component of a single, integrated ecosystem. The BLM recognized this important principle in the Draft EIS. With respect to wildlife values, the document states:

> The Owyhee River WSAs provide excellent habitat for many species of wildlife. The primary species are California bighorn sheep, mule deer, antelope, Canada geese and other waterfowl, raptors and other birds, river otter, beaver, mountain lion and bobcat. Wildlife diversity associated with the rhyolite canyonlands/sagebrush-bunchgrass ecosystem is a result of many vegetative types that exist in unique habitat features created by the joining of sagebrush-bunchgrass plateaus and deeply cut canyons. Some species are dependent on this ecosystem for year-round habitat, and other species can be found seasonally. For the most part, wildlife habitats are in good condition on the steep slopes and canyon bottoms and fair to poor condition on the plateaus. (emphasis added). Draft EIS, p. III-7.

Deer, bighorn sheep and sage grouse all depend on both the canyons and plateaus for habitat. The same is true of raptors such as golden eagles and prairie falcons, which nest in canyon cliffs but forage far beypnd on the plateaus. As noted in the Draft EIS, populations of pronghorn antelope are primarily limited to the plateaus. Draft EIS, p. III-7. Thus, preservation of this species may well depend on protection of plateau lands.

In addition to the critical need for the plateaus as wildlife habitat, the plateau land offers scenic and recreational values comparable to the canyons themselves. The BLM has recognized the plateaus' high values for solitude and primitive recreation. The Draft EIS states in part:

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> The outstanding opportunities for solitude in each WSA are attributed to the isolated, intimate seclusion of canyonlands and the viewing of hundreds to thousands of square miles of vast, open, seemingly undisturbed desert plateau lands and distant mountain ranges.
>
> * * *
>
> From many high points on the plateaus, one can see hundreds to thousands of square miles of vast open spaces seemingly untouched by man stretching eastward from the Steens mountains in Oregon to Juniper Mountain in Idaho, southward to the Bullrun mountains of Nevada. These vast open spaces instill a sense of complete separation from civilization.
>
> * * *
>
> Hiking on the plateaus also provides an opportunity to experience vast, open spaces stretching into the distant horizon. Therefore, many of the plateau areas have outstanding primitive experiences equivalent to those of the canyons. (emphasis added). Draft EIS, pp. III-2, III-3, III-4.

We believe that in the Manager's consideration of this wilderness issue, there is no more important value than the opportunity for solitude which is offered by the Owyhee Canyonlands.

For these reasons, we feel that the BLM should designate as wilderness a much greater acreage of the plateaus. The specific example of Deep Creek and Battle Creek illustrates the need for protection of more plateau land. The BLM has designated the Owyhee River-Deep Creek area as WSA ID-16-49A, and the Battle Creek WSA as ID-111-49E. While the BLM All Wilderness proposal includes substantial portions of the Deep Creek and Battle Creek canyons, as well as

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some plateau above the canyons, the BLM proposal nevertheless excludes a portion of the plateau which lies between these magnificent desert streams. Each of these canyons and the plateau between them provide habitat for bighorn sheep, mule deer, cougar, golden eagles, prairie falcons, other raptors, and a variety of other birds, small mammals, snakes and lizards. Antelope live on the plateau between Deep Creek and Battle Creek.

We respectfully submit that, having designated for wilderness portions of Deep Creek and Battle Creek, and the plateaus above, it would make little sense to permit any consumptive use of the land lying between the lands classified as wilderness. Such consumptive uses as mineral and energy exploration, or any additional grazing, could have serious, harmful effects on wildlife populations and the land itself. Thus, we strongly recommend that the BLM modify its proposal as to Deep Creek and Battle Creek in accordance with CIHD's proposal. In addition to providing complete protection for the plateau between Deep Creek and Battle Creek, the CIHD proposal would protect the entire Deep Creek and Battle Creek drainages. These are some of the finest wild streams remaining in the West, and should be given the maximum possible wilderness protection. .01

We support CIHD's proposal on all other areas, because it would enable creation of the finest high desert wilderness in the United States, and one of the most outstanding wilderness areas anywhere. Most of the existing wilderness areas in the United States are located in mountainous areas. Only a small percentage of desert lands have been designated as wilderness. This is another important reason to make a large portion of the Owyhee Canyonlands wilderness.

We encourage the Manager to give serious consideration to this letter and to amend the BLM position to propose as wilderness the 1.2 million acres recommended by CIHD. Alternatively, we urge the Manager to follow the All Wilderness proposal of 436,047 acres instead of the proposed action of 374,160 acres, which would remove from wilderness 63,267 acres. As the BLM acknowledges, removal of this plateau land would result in a decline in opportunities for primitive recreation and solitude. Draft EIS, p. ii. Wilderness is the highest and best long-term use of these public lands, and these plateau lands should be reinserted into the BLM's final proposal.

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We specifically urge the Manager to include as wilderness the 28,000 acre area in the southeastern part of the Owyhee River Canyon WSA (OR 3-195) in Oregon. This area is important habitat for antelope and bighorn sheep and, if protected as wilderness, would prevent mining in the heart of the Owyhee Canyonlands wilderness. The southern 8,350 acres of Nevada's Owyhee Canyon WSA should likewise be included as wilderness. River access could be facilitated by providing for a 100-foot wide road corridor to the private property along the river. We also request the Manager to add back as wilderness the 3,440 acre reduction proposed for the southern portion of Idaho's Battle Creek-Deep Creek WSA (16-49A). As we have previously discussed, the Battle Creek-Deep Creek area has very high wildlife, ecological and watershed values.

For the foregoing reasons, we recommend the inclusion of 1.2 million acres of the Owyhee Canyonlands as wilderness. These lands are still wild and remote and present a rare combination of natural beauty, diversity of wildlife, and solitude. As noted by the BLM, wilderness designation "would not significantly impact the economic conditions of Malheur, Owyhee or Elko Counties." Draft EIS, p. iii. The Owyhee Canyonlands provide superb recreational activities for whitewater boaters and rafters, hikers and photographers. This is one of the finest remaining opportunities in the United States to give meaningful protection to a significant area of our fast diminishing wild lands. We urge the Manager to take full advantage of this opportunity and to propose wilderness protection for the Owyhee Canyonlands. .02

Very truly yours,

Pat Ford

Pat Ford, Executive Director

PF:gh

May 29, 1984

Martin Zimmer
BLM, Boise District Office
3948 Development Avenue
Boise, Idaho 83705

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Dear Sir,

I would like to make a few comments on the Owyhee Canyonlands DEIS. First I would like to compliment you on the quality of the production. Your exhaustive research is well presented, and the book itself is a very attractive package. I was also impressed by the high regard with which the writers of the DEIS view the Owyhee country.

If I were able to meet with you, or if you had time to answer all inquiries, I would ask about a couple of details in the DEIS, but in this situation I will make assuptions and change the questions to comments.

1. On page II-17 the DEIS states that even under the all-wilderness alternative grazing use would increase by 43,583 AUMS, yet in the paragraph above (and in the BLM's Wilderness Management Policy p. 22) it states that livestock use "would remain at or near the level of use occuring at the time of (wilderness) designation". With no further rangeland "improvements" and no degredation of the range desired under wilderness designation, I do not see how or why grazing use should increase by 20% and more. .01

2. Another apparent inconsistency can be found on page II-11. The all-wilderness alternative was not chosen as the preferred one, presumably because of difficulty of management, yet the DEIS states that under the all-willderness alternative "measures to enhance managability. . . would not occur". I would hope you would consider closing roads and acquiring land for the all-wilderness alternative just as you would for the wilderness portions of the other alternatives, or any wilderness. .02

In conclusion I would like to ask that as much as possible of the Owyhee Canyonlands be designated wilderness. I have never been to the Owyhee country, but the glowing descriptions in the DEIS assure me that it is a place I would like to visit, (and thus would like to have protected until I get there); but even if I never personally enjoy the area, I believe that its value for other visitors, for wildlife, and for a prime example of the natural world, untrammeled by man (even though it has been, and apparently will continue to be, trammeled by cows) make it deserving of protection. Areas like these are becoming rarer all the time, and we should save what we can.

Based on the above factors, and the fact that since grazing will not be reduced, and should not be increased, there will be little or no economic effect on the area; I would like to cast my "vote" in favor of the all-wilderness alternative, and urge that you consider the "conservationists modified all-wilderness alternative" though I'm not familiar with the details of that. Please, too, keep in mind the possibility of combining this wilderness with adjacent WSA's in the future to create a truly world class example of the steppe-canyon wilderness environment.

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Thank you for the opportunity to comment on this proposal, and thank you for coming as far as you have in support of wilderness for the Owyhee country.

Sincerely,
Joseph W. Hinton

Joseph W. Hinton
3525 SE Milwaukie Avenue
Portland, Oregon 97202

Sierra Pacific Power Company

JACK L. BYROM, P.E.
Vice President-Engineering

May 31, 1984

RETURN RECEIPT REQUESTED

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Mr. Martin J. Zimmer, Manager
Boise District
Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Re: BLM - Draft Owyhee Canyonlands Wilderness EIS

Dear Mr. Zimmer:

Sierra Pacific Power Company would like to thank you for the opportunity to comment on the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement dated February 1984.

Sierra Pacific strongly opposes all the wilderness alternatives with the exception of the "No Action Alternative" addressed in this Draft document. Only the proposed action (All Manageable Wilderness Alternative) addressed the utility corridor issue. The establishing of a 1/4 mile wide underground utility corridor along the Northwest Gas Pipeline is totally unacceptable.

Sierra Pacific is not opposed to the wilderness concept. However, we are concerned with the impact that wilderness recommendations will have on existing and future transportation and utility corridors. We believe a long range look at regional utility corridor questions were not adequately considered in the development of this draft document. .01

"Transportation and Utility Corridor" planning has been directed by Congress through the Federal Land Policy and Management Act of 1976, § 503, and subsequently addressed in 43 CFR 2800, the BLM Manual, and BLM Bureau-wide instruction Memoranda. Transportation and utility corridor planning is an important element of the National Energy Policy, Multiple Use Management, and Transportation and Utility Planning by industry. Without appropriate planning for future energy transportation and development, the FLPMA objectives of minimizing environmental impact through land use planning may not be achieved. Some possible ramifications of not achieving these objectives include greater environmental impact and increased energy costs if the national energy policy encouraging domestic energy production is not fulfilled.

P.O. BOX 10100/RENO, NEVADA 89520/TELEPHONE 702/789-4832

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Sierra Pacific, and others in the utility industry, have provided information regarding the importance of a viable utility corridor through the canyonlands study area. The Bureau of Land Management appears to have largely ignored this input in light of the following chronology of involvement and events:

June 1980 - Western Utility Group published the eleven western states' "Western Regional Corridor Study", which outlined industry's needs for existing planned and future utility corridors.

February 8, 1983 - Sierra Pacific provided written comments with regard to the corridor issue during the scoping period on alternatives. Recommendations made on corridor widths.

April 17, 1984 - Sierra Pacific gave oral testimony at the Reno, Nevada public hearing on the importance of this corridor, and requested wilderness boundary adjustments.

Also, to date, two major inter-state transmission feasibility studies have been developed of which the Bureau of Land Management was aware. The "Intertie Corridor Evaluation Report", dated April 1984, and the "Trans-Sierra Intertie Feasibility Study", to be released in July 1984, have been in the development stage for a year or more, and have addressed the Northwest Gas pipeline corridor for additional electric transmission facilities.

In conclusion, we find the Draft Owyhee Canyonlands Wilderness EIS to be a deficient document which does not address national and regional energy concerns or multiple use management. We very strongly recommend that all deficiencies be addressed in a revised and republished DEIS. .02

We hope that our concerns can be resolved prior to your submitting the Preliminary Draft EIS to the Secretary of the Interior.

We look forward to working with you on this issue. Please contact Stephen Younkin, Supervisor, Right of Way Acquisition, at (702) 789-4747, concerning this matter.

Sincerely,

Jack L. Byrom

JLB/SY/ro

cc: Ed Spang - BLM NSO
Jack Setey - BLM NSO
Rod Harris - BLM Elko
Robert Burford - BLM Washington

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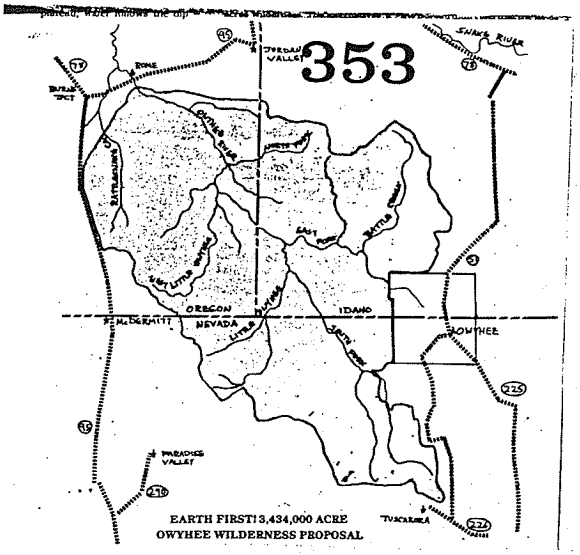
Dear Sir, May 29, '83

I am writing in response to your draft Environmental Impact Statement for the OWYHEE WILDERNESS (D.E.I.S.). The five alternatives considered are sadly lacking in scope and factual data. I can only support a true Wilderness proposal.

The EARTH FIRST! proposal of a 3,434,000 acre Wilderness is the only alternative that is reasonable and responsible. This proposal would

- deal almost exclusively with Public lands (99% of proposed area).
- not affect any roads of importance.
- not involve any significant mineral deposits.
- protect larger numbers of bighorn sheep and Pronghorn.
- end a costly livestock grazing program
- help maintain 8 endangered plants

①



EARTH FIRST! 3,434,000 ACRE
OWYHEE WILDERNESS PROPOSAL

There is more outstanding country in the high desert then just the river canyon itself. It is a fragile place that needs protection.

cc: GOV. VIC ATIYEH

Steve Marsden - CHAIRPERSON
KALMIOPSIS ACTION ALLIANCE
P.O. BOX 212 WILLIAMS, OR 97544

②

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May 31, 1984

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Dear Sirs:

Having reviewed the Owyhee Canyonlands Wilderness EIS, I offer the following observations.

Mr. Milesnick and his fellow team members have generally done a good job preparing this EIS under the revised CEQ guidelines. Considering the atmosphere surrounding wilderness issues in the west, Idaho in particular, they are to be congratulated.

However, discrepancies do exist in the EIS. These center primarily around the wildlife populations of the plateaus in the affected areas. In the wildlife resource section, sage grouse and antelope are mentioned as present, with no further elaboration.

While emphasis was placed on the high chuckar partridge populations of the canyons, the chuckar is an introduced species, whose populations are essentially stable throughout its range in the intermountain west.

The sage grouse, on the other hand, while not presently listed as threatened or endangered, is declining in Idaho, as documented by Mr. Robert Autenrieth of the Idaho Department of Fish and Game. This decline results from continued conversion of the grouse's steppe-sage habitat from rangeland to croplands, or intensive rangeland development techniques which promote forage grasses at the expense of sagebrush. While sage grouse do not require wilderness characteristics as defined by law, they do require contiguous suitable steppe-sagebrush habitat from the higher elevation nesting grounds to the lower elevation wintering areas. .01

The plateau lands furthermore are important hunting areas for raptors nesting in the canyons. Herbicide spraying and seeding of non-native grasses, ground squirrel poisoning, and other intensive livestock management techniques, as well as mineral development, could significantly reduce current raptor populations of the Owyhee Canyonlands by reducing prey populations.

The final EIS should clearly state that the All Manageable Wilderness Alternative would reduce sage grouse and raptor populations over a larger area than the 63,267 acres not designated wilderness.

Negative and positive impacts on wildlife resources should be stated in a way more clearly separate from impacts on wilderness characteristics.

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Potential negative impacts of the recommended alternative on sage grouse should be stated within the context of this specie's overall decline in the intermountain west. The cumulative impact of incremental habitat degradation is classically represented by the All Manageable Wilderness Alternative, as well as by the so-called Wildlife Wilderness, Canyonlands Wilderness, and No Wilderness/No Action alternatives. More accurate names for Alternatives 1, 3, and 4 would be appropriate. .01

It would also be helpful if the acreages of plateau lands which would be managed for grazing levels compatible with wildlife such as sage grouse, were identified for each alternative.

The EIS unnecessarily and misleadingly emphasizes potential negative impacts on wilderness characteristics, for the All Wilderness Alternative, while failing to point out benefits to wildlife dependent on plateau lands.

The EIS should explain why the plateau lands cannot be managed for grazing, native range improvement with attendant wildlife benefits, and motorized access. The EIS should describe an alternative that includes non-wilderness, multiple use wildland management for the 63,267 acres of plateau lands. Such an alternative could optimize benefits for wildlife, recreation, and the stock raising industry as mandated in the Federal Land Planning and Management Act (FLPMA), while incorporating the wilderness acreage in the BLM's recommended alternative. .02

Thank you for the opportunity to comment on this Draft EIS. I hope they help the EIS and the proposed action conform with the letter and principles of the Wilderness Act, National Environmental Policy Act and the Federal Land Planning and Management Act.

Sincerely,

Douglass A. Pineo
Graduate Fellow
Institute for Resource Management
Washington State University

DAP:mn

Steve Kramer
4895 Donald
Eugene, Or
97405

mr Joe Zimmer
District manager
Bureau of Land Management
3948 Development Avenue
Boise, Id 83705

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Dear mr Zimmer,

This letter constitutes my response to the Owyhee Canyonlands Wilderness DEIS. I request that it be entered into the record and the suggestions contained within used in formulating the FEIS.

As an opening comment I would just like to say that I am amazed that the Bureau can continue to publish EISs without ever having done adequate studies. The rare plant and non-game wildlife information on the Owyhee country is so woefully inadequate as to be a criminal act to call it a data base. As a field biologist working on a Riparian Study in Nevada I am painfully aware of not only the lack of this kind of information but also of the unwillingness of the agencies to obtain this data. How can this supposed EIS assess impacts when what is really out there remains a mystery? .01

Another major comment I have is that the Bureau has again missed one of the major features of the Owyhee country, that of its size and the opportunities that creates. We have a chance here to preserve one of the largest, if not the largest chunk of wild land in the lower 48 states. Sure a few scars will have .02

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to be healed, some fences removed and some virtually impassable (to most of the public) roads would be closed, but these things are ever so small in comparison to the benefits of having a "Big" wilderness. A wilderness where a person could wander for weeks and encounter hundreds of other species but never her/his own. A wilderness big enough to preserve the diversity of the biotic community without being traumatized by natural events in small areas. A wilderness where the Endangered Species Act could truly be implemented and other inhabitants of this planet could once again find a home. .02

I whole heartedly support as a reasonable balance the 3.5 million acre Owyhee wilderness proposal put forth by Earth First. I support the closure of all roads in the proposal, the removal of all fences, the revegetation of all "range improvement" projects and the elimination of all livestock grazing in the Wilderness.

The benefits of such a proposal are enormous. The public would gain monitarily by the removal of all livestock grazing as the are currently subsidizing those public land grazers with tax dollars through the bureau's ludicrously low fee system. The increased recreational use would help diversify the economy of adjacent communities. The impact of this use on the area would

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be minimized by spreading it out over a large area. The back country hunting experience of many would be greatly enhanced as the elimination of livestock grazing would make way for considerable expansion of both game and non-game species. The revenue brought to the state from increased Bighorn and Antelope hunting alone would greatly surpass any management costs assumed by the government. There would not be any loss of Roaded Recreation Days as there are many times more roads today than anyone needs. The public would also gain spiritually as our freedom, our heritage, our homeland mother would be enhanced.

Lastly the preservation of diversity on this planet and thusly the preservation of life itself rests on the establishment of large biological preserves. The Owyhee country would be an important link as a major high desert ecosystem in a world wide system of preserves.

The other benefits of wilderness are too numerous to state here and are better experienced than explained. The Bureau has an important obligation as land managers and it is time the lived up to that obligation and analyzed a real wilderness proposal such as the one drafted by Earth First.

I am sorry my comments could not be more in depth and neat but time and conditions in the field do

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not make that possible.

Respectively submitted,

Steve Kramer

30 May 1984

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Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Ave
Boise, Idaho 83705

Re: comment on Owyhee Canyonland Wilderness EIS Draft

Dear Sirs:

The EIS needs major revision from the Draft because of the following significant flaws:

1. The issues identified for analysis explore only "the impact of wilderness designation or nonwilderness designation on" livestock grazing, public access, etc. An equal emphasis, however, should be placed on addressing the impact of livestock grazing, nonnative grass seedings, mineral and energy development, public access, etc. on wilderness values and should be added to the issues identified for analysis on page i. .01

2. The alternatives presented do not adequately address the available reasonable options. The options reveal a lack of sensitivity to the wilderness values of Owyhee plateau's sagebrush-steppe ecosystem, since all the proposals adhere obnoxiously adjacent to the canyonlands. Specifically, I would request that a 3,434,000 acre area as proposed by Earth First! be added to the available alternatives. .02

Furthermore, because the "Canyonlands Wilderness" alternative ignores the integrated nature of plateau-canyonlands interaction, causes an imbalance to the available options and adds no recognized advantages over any of the other alternatives, I request its deletion from the presented alternatives. .03

A number of poorly supported, invalid and contradictory positions need to be pointed out, and other modifications made as follows:

1. The implication that an area is unmanageable because of the liklihood of malicious and illegal acts is a questionable use of the manageability criterion, and the liklihood of these acts are speculative and not substantive. I am referring specifically to the contention that illegal ORV use is likely to occur on 63,267 acres of plateau lands if designated as Wilderness in the "All Wilderness" alternative (see pp. v and I-7). Furthermore, it is contrary to policy to establish buffer zones of nonwilderness land as the"Manageable Wilderness" alternative effectively does by deleting the plateau lands from Wilderness designation. .04

2. Page I-5,6 should provide for the following additional issues:
   a. 2) The impact of livestock grazing operations on wilderness values including:
      a) watershed and erosion
      b) water quality and water flow
      c) rangeland "improvements" including nonnative grass seeding
      d) aesthetics
      e) ecosystem integrity

   b. 2) impact of public access and recreation use of the Owyhee River and the surrounding plateaus on wilderness values

   d. 2) impact of vegetation composition and condition on wilderness value

   e. 3) impact of erosion, streambank stability and water quality on wilderness value .05

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   f. 3) impact of mineral energy exploration and development on wilderness values
      4) impact of utility corridors on wilderness values .05

   g. 3) economic impact to BLM (and ultimately the taxpayer) of wilderness vs. nonwilderness designation
      4) economic impact to BLM of present and projected grazing implementation (including administrative and range "improvement" costs) .06

3. The section "Environmental Consequences of Livestock Grazing" (pp. IV 14-18) is particularly in need of revision. In no other part of the EIS is the single-use cow-pasture mentality so apparent as here. Our public land is referred to as "pasture" no less than four times, and the small amount of remaining sagebrush-bunchgrass ecosystem still in good to excellent condition is considered to be "excess forage"! On the one hand BLM recognizes that "the higher the ecological condition, the greater the amount of forage production."* On the other hand BLM contends that lands in high ecological condition represents "excess forage"! Our public lands should not be managed merely as pastures, but rather should be recognized and managed for what they are--life-sustaining ecosystems with complex interactions deserving the greatest respect and care! .07

4. The environmental consequences of cattle grazing are mostly ignored, even denied. No explicit recognition is given for the following points: 1) the poor to fair condition of Owyhee's sagebrush-bunchgrass ecosystem is a result of overgrazing by livestock, 2) the "fair or poor condition in all areas" of aquatic (and riparian) habitat is a result of livestock intrusion, and 3) increased livestock grazing will result in increased grazing pressures and therefore ecosystem degradation. .08

All alternatives propose to increase livestock use within WSA boundaries according to Table IV-4 (p. IV-17), and the intent is corroborated in most of the EIS statements. However, the EIS speaks of intending "restrictions on increasing livestock use" (p. IV-1, 2nd paragraph under A.1.a.) and of "maintaining or reducing livestock levels" (p. IV-19, 1st paragraph under E.1.). What, really, does BLM intend to do? If BLM intends to increase grazing, then E.1. (p. IV-19) needs to read that soil erosion and disturbance in the wilderness are would be increased, not reduced from current levels (which are already bad!). Would it be too outrageous to suggest that the rangeland be allowed to reach and be maintained at good to excellent condition (i.e. late-seral to climax condition), and that such conditons are most realistically realizable by decreasing or eliminating livestock grazing pressures? (In fact, perhaps all BLM rangelands could benefit by such suggested optimal range conditions and its mode of attainment!) .09

5. On p. IV-17 we read the contention that a large number of AUMs that are "available" could be used without adversely affecting wilderness values. That statement is just plain false. The following wilderness values would be adversely affected by increased grazing within WSA boundaries and surrounding lands:
1) decreased sense of wildness because of the presence of domestic animals
2) deterioration of sagebrush-bunchgrass ecosystem
3) increased erosion and watershed degradation resulting in deterioration of water quality in the canyonlands
4) decreased available forage for native grazers
5) deterioration of archeological resources
6) deterioration of aesthetic values including the associated dust, flys, ticks and dung that livestock inevitably bring and leave. .10

* ref. Brothers Grazing Management Program EIS draft p.59

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Some further specific considerations that should be addressed in the EIS are as follows:
1) effects of and provision for exclusion of cattle from riparian zones
2) provision for exclusion of cattle from lands particularly sensitive to erosion
3) specific viable approaches for optimizing Owyhee River water quality
4) specific viable approaches for optimizing rangeland condition in harmony with maintaining wilderness values .11

In summary, the draft EIS for the Owyhee Canyonlands Wilderness needs major revision and modification. In particular, these gems of public land need to be treated from a holistic, multiple resource standpoint--including the vast surrounding sagebrush-bunchgrass plateau areas. Please don't contemptuously hold pristine bunchgrass growth to be merely "excess forage"--there are those of us who know better!

Sincerely,

Craig Miller

Craig Miller
P.O. Box 6376
Bend, OR 97708

Sierra Club
NORTHERN ROCKIES CHAPTER

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MEMBER GROUPS
Eastern Idaho
Middle Snake
Palouse
Sawtooth
Spokane

Reply to Box 552
Boise, ID
83702

to: Boise District
BLM

Subject: Owyhee Canyonlands Wilderness DEIS.

1. Northern Rockies Chapter of the Sierra Club has formally endorsed the 1.2 million acre proposal prepared by the Committee for Idaho's High Desert.

2. We hope you will adopt this proposal as the prefered alternative for your Wilderness recomendation for the Canyonlands area of SW Idaho and SE Oregon.

Thank you

Charles Snyder

"Not blind opposition to progress, but opposition to blind progress."

Oregon Natural Resources Council

Main Office: 1161 Lincoln Street, Eugene, Oregon 97401 (503) 344-0675

Metro Office
Dekum Building, Suite 706
519 SW 3rd Avenue
Portland, Oregon 97204
(503) 224-0201

Eastern Oregon Field Office
Box 9
Prairie City, Oregon 97869
(503) 820-3714

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May 31, 1984

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

To whom it may concern,

Below are our comments on the Draft Environmental Impact Statement for the proposed Owyhee Canyonlands Wilderness. Please include them in the official record. They are in addition to our comments at the public hearing in Portland.

1. While we are pleased to see that the Bureau of Land Management is proposing to recommend that Congress protect some land as federal Wilderness, we believe that the agency is unwisely excluding some vital areas from their proposal. The BLM proposal is just a limited portion of the wildland in the Owyhee Canyonlands country. It involves only one Wilderness Study Area in Oregon and several in Idaho, for a total of 436,000 acres. The Oregon Natural Resources Council is endorsing the proposal by the Committee for Idaho's High Desert which would designate approximately 1.2 million acres (525,000 in Oregon) as a comprehensive Owyhee Canyonlands Wilderness. That alternative proposal, along with the 3.4 million-acre alternative proposal by Earth First!, should be fully and equally considered along with the BLM's alternatives in the Final EIS. The BLM is proposing to delete approximately 44,000 acres of qualifying land by its recommendation. There is nothing lacking in the wilderness quality of these lands no justifiable potential conflicts have been identified--the agency simply seeks to develop them for livestock grazing and other such activities. .01

2. In general, the document is well formatted and easily understandable. It does however suffer from some procedural and substantive flaws in regard to the National Environmental Policy Act. Undoubtedly the BLM has reviewed the opinion on the US Ninth Circuit Court of Appeals in regard to the legality of the US Forest Service's second Roadless Area Review and Evaluation. It is ONRC's belief that he DEIS does not conform to the requirements for wilderness review set forth by that court. ONRC respectfully requests that the responsible official review that opinion before making a decision on the proposal set forth in the FEIS. .02

3. The document itself and the BLM's Wilderness proposal suffer from "plateau predjudice." An equally distressing reason that the agency doesn't wish to preserve this 44,000 acres as Wilderness is that it has a bias in its wilderness decision-making. The BLM favors "canyons and lava flows" for desert Wilderness protection just as the Forest Service favors "rock and ice" for national forest

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Wilderness protection. If we are to preserve some of what commonly occurs in the Oregon desert, we must protect the rolling hills and plateaus of native sage and bunchgrass. The Owyhee Canyonlands are unique in the Oregon desert and that is of course a reason for their protection. The public wants to preserve representative examples of all kinds of Oregon high desert, from canyons to alpine peaks, from lava formations to chalk-like cliffs.

4. The FEIS should clearly define the actual range developments proposed under each alternative. Exactly what will be the reduction in wilderness character? .03

5. Similarly the FEIS should break out the grazing by allotment which is attributable to the WSA--not just total allotment figures. .04

6. The FEIS should also consider a "worst case analysis" as required under the National Environmental Policy Act (the BLM is well aware of these cases). The WCA is necessary to accurately depict what might happen to these lands if not designated Wilderness. For example, the Area of Critical Environmental Concern and Bighorn Sheep Management Area should nice in principle, but they will not stop mineral exploitation. Only Wilderness designation can do that. If the worst case does occur in regards to mineral exploitation, will the ACEC and BHSHMA designations does as intended. .05

7. The BLM's argument that portions of the WSA's are unmanageable is rather weak. With no conscious attempt at management by the agency the area, after all these years, still has outstanding wilderness characteristics. But if the BLM now tries to manage the area as Wilderness it cannot do so. ONRC finds that hard to believe. .06

8. Non-BLM inholdings (surface and subsurface) which the BLM is using to disqualify portions of the WSA should be acquired. .07

Thank you very much for the opportunity to comment on the proposal. Please send us a copy of the Final EIS when available.

Sincerely,

James Monteith
Executive Director

JM/ak

cc: Sage Association, Inc.
Committee for Idaho's High Desert

7932 SE REED COLL PL
PORTLAND, OR 97202
29 MAY 84

BLM · BOISE DISTRICT
3948 DEVELOPMENT AV.
BOISE, ID 83705

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SIRS:

IN COMMENT ON THE OWYHEE CANYONLANDS WILDERNESS, I SUBMIT THE FOLLOWING:

1) NOISE. THE FINAL EIS SHOULD EVALUATE THE IMPACT OF LOW-ELEVATION AIRCRAFT NOISE ON EACH MANAGEMENT ALTERNATIVE. POLICIES FOR ABATEMENT SHOULD BE EXPLORED. SEE ATTACHED. .01

2) HUMAN IMPACT RECOVERY. THE DRAFT EIS DOES NOT DISTINGUISH BETWEEN THE PROTECTIVE MEASURES NECESSARY FOR WILDERNESS HERE (OWYHEE CANYONLANDS) AS COMPARED WITH OTHER WILDERNESS. I AM CONCERNED BECAUSE OF THE HARSH ENVIRONMENT IN OWYHEE CANYONLANDS. THE HARSH ENVIRONMENT MEANS A LONGER RECOVERY FROM ANY HUMAN USE (GRAZING, HORSEBACK PACKING, ETC.) AS A RESULT, MORE SEVERE PROTECTIVE MEASURES SEEM APPROPRIATE FOR THE OWYHEE CANYONLANDS WILDERNESS. THE FINAL .02

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EIS SHOULD INCLUDE SUCH COSTS IN ITS WILDERNESS EVALUATION. .02

3) CHOICE: I FAVOR THE LARGER WILDERNESS AREA DESIGNATION IDENTIFIED BY THE ONRC AND OTHER CONSERVATION ORGANIZATIONS.

PLEASE SEND ME INFORMATION ON YOUR FINAL EIS ACTION.

SINCERELY,

JOHN L. FREWING
7932 SE REED COLLEGE PL.
PORTLAND OR 97202

Mr. Joe Zimmer
District Manager
Bureau of Land Management
3948 Development Avenue
Boise, ID 83705

Jennifer Holmes
160 Lincoln
Palo Alto, Ca. 94301

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Dear Mr. Zimmer,

In looking over the Owyhee Canyonlands Wilderness E.I.S. I have found the alternatives proposed by the BLM to be unsatisfactory. I feel that to adequately encompass the diversity of the area a larger portion of the area must be protected as wilderness. I have found the Earth First proposal of 3,434,000 acres to be the most reasonable alternative yet proposed. .01

Although many people enjoy the Owyhee area while floating the river, it is a mistake to propose wilderness designation for only the river and its canyon. To protect only a fragment of this vast wild area would surely affect its integrity.

Moreover, in protecting a large area we would insure the maintenance of the great diversity of habitats and the wildlife associated with these habitats. This is of the utmost significance. Our desert lands are already, and will continue to be, drastically altered by man's actions, much to the detriment of the plants

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and animals which normally inhabit a healthy desert ecosystem. The wildlife of the Owyhee area use not only the canyons but the adjacent plateau. Let's make the Owyhee wilderness an example of a healthy desert ecosystem affected only by the forces of nature. To insure this we need to protect a large, diverse area.

In addition, all grazing should be stopped within the wilderness area. I do not believe this is unreasonable in any way. There is no adequate justification for grazing any of this area. There must be somewhere (for plants, wildlife, and people) where there are no cows!

Also, all roads should be closed within the area. This would decrease the chance of ORV use within the wilderness and make it easier to manage.

In sum, I love the Owyhee area and hope you will consider protecting 3½ million acres of it — not just for the sake of the people who ~~love~~ would love to see it protected or the wildlife that inhabits it, but for the land itself so it can remain the wild and beautiful place that it is.

Sincerely,
Jennifer Holmes

PS - I'm sorry this letter couldn't be typed. I'm working as a field biologist in the middle of Nevada and there's no typewriter within miles!

John & Margi Timm
473 E. Vine St.
Lebanon, OR 97355

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May 30, 1984

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

Our comments on the proposed wilderness designation:

There is no need for wilderness designation of the Owyhee Canyonlands as they are Federally owned. The fact that they are being considered for such designation after fifty years of management by the Bureau of Land Management is in itself testimony that the management has been satisfactory.

Continuation of such multiple use management under the No Wilderness No Action Alternative will provide greater economic benefits to the local residents and governments without materially changing the wilderness value criteria listed in Chapter V.

Wilderness classification will deny many people the opportunity to visit the area. In our case we have recently retired and are in the process of visiting similar areas which we had to postpone visiting because of time and family constraints while working. With the proliferation of new wildernesses and wilderness additions we are faced with the prospect of greater walking distances requiring arduous backpacking trips which we are physically unable to undertake, or expensive guided pack trips and float trips which are unaffordable. Many of the conclusions in favor of wilderness in the E.I.S. are based on inadequate information or misleading data. For example, the economic summary (Chapter IV) on incomes and employment covers the three counties where most of the population is centered in agricultural or industrial areas some distance from the study area. The reduced income and employment impact from the wilderness alternatives compared to no wilderness no action alternative may have little impact on the tri-county area but would have significant impact on the area adjacent to the study area and the population dependent on the study area. .01

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Also the estimated $15,000.00 increased administrative costs under the Wilderness alternatives appear greatly understated. The construction and maintenance of traffic barriers and necessary enforcement patrols each would greatly exceed the estimate. .02

We favor the No Wilderness No Action Alternative.

John L. Timm

Margi F. Timm

AtlanticRichfieldCompany 555 Seventeenth Street
Denver, Colorado 80202
Telephone 303 293 7577

J. R. Mitchell
Manager
Public Lands Coordination
Government Relations

May 31, 1984

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Mr. John Benedict
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, ID 83705

Re: Owyhee Canyonlands Wilderness EIS

Dear Mr. Benedict:

Atlantic Richfield Company would like to offer the following comments regarding the Draft Wilderness EIS on the Owyhee Canyonlands.

The Owyhee Canyonlands is relatively unexplored to date. Therefore, we do not believe that it is appropriate for BLM to make a wilderness recommendation for these areas before adequate energy information is acquired. It is essential that exploration teams have access to these areas to conduct exploration programs which must be performed to gain adequate understanding of the geology. Essential exploration activities that must be conducted include geologic field reconnaissance and sampling, geophysical and potential field survey crews, and well drilling. Without the information afforded by such activities, there is no possible way to make a site-specific determination as to the subsurface resource values. Exploration for oil and gas has essentially taken in all those areas easily accessible and new exploration frontiers have become more and more scarce in recent years. If areas such as those found in the Owyhee Canyonlands are withdrawn from energy and mineral access through wilderness or other programs, the opportunity to adequately assess their subsurface resource potential will be foregone, possibly forever. Therefore, we urge BLM to make its decision regarding wilderness extremely carefully utilizing all the resource factors involved.

All eight WSA's encompassed in the Owyhee Canyonlands study area have potential for oil and gas reserves and precious metals. The southwest corner of Idaho is largely covered by a veneer of Tertiary/Quaternary

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volcanics, and lacustrine and fluvial deposits. The volcanic rocks mask potential objectives for oil and gas, which may include Paleozoic carbonate rocks and Tertiary clastic rocks. This cover imposes serious exploration problems. However, we believe they will be resolved eventually by refining geologic concepts, advancing new geophysical techniques, and drilling test wells. With regard to minerals, the geologic features contained in the Owyhee Canyonlands host similar gold and silver deposits as those found in the Delamar, Idaho, Mining District as well as uranium and mercury deposits similar to the Midnight Mining District in Nevada. We have attached energy and mineral evaluation forms for each of these WSA. These forms provide BLM with our interpretation of the geologic favorability for energy and mineral potential.

We are particularly concerned with three WSA's in which Atlantic Richfield Company has current leases. We are, therefore, proposing boundary changes for NV-010-103A, and ID-16-48C, and a nonwilderness recommendation for WSA ID-16-52. The attached map indicates the location of our acreage as well as our recommendations for boundary modifications based upon our acreage holdings. You will note that in ID-16-52 that our leases cover the entire WSA with the exception of about one and one-half sections. We are concerned that if such modifications are not made, we will be unable to conduct normal leasehold activities such as exploration and possible development. Given the fact that we do indeed have valid leases in these areas, BLM should make appropriate boundary changes to alleviate these conflicts. In addition, as a result of our acreage position, we believe that ID-16-52 should be recommended for nonwilderness. .01

With regard to the energy and mineral evaluation forms, it should be noted that these evaluations reflect current knowledge and technology and must be subject to modication should new information become available. This is especially true due to the nature of exploration activities and the possibilities that new information or technology could shed new light on the areas' potential.

The Rocky Mountain Oil and Gas Association has developed a matrix review process which shows access constraints and geologic potential in matrix form. A copy of their report is attached. We would suggest that BLM planners use this matrix format to more accurately assess the effects of their decisions on the possible development of energy and mineral resources. The matrix system was designed to utilize

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the information provided by the evaluations. However, the evaluation system may be used independently from the matrix system. One point we would like to make clear is that it is BLM's ultimate responsibility to formulate the final ratings for these WSA's. Therefore, it is not appropriate for individual company ratings to be published in any agency documents. We realize, however, that these evaluations will be available under the Freedom of Information Act.

As you know, we have scheduled a meeting on June 26 in Boise at 10 a.m. in order to discuss our recommendations. Should you have any questions prior to our meeting, please let us know.

Sincerely,

Jay R. Mitchell

J. R. Mitchell

Attachment

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Form 3030-2 (June 1983) — UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT — BASED UPON FORM APPROVED OMB NO. 1004-0129

ENERGY AND MINERAL RESOURCES EVALUATION

1. State	b. County
Idaho, Nevada, Oregon	

c. District	d. Resource Area	e. Planning Unit
	Owyhee Canyonlands	

f. Wilderness Study Area Name	Number
Owyhee River Canyon	OR-3-195(ID-16-48B)

2. RESOURCES
List Names of Resources

NONFUELS	FUELS
Gemstones	Uranium
Gold	
Mercury	
Silver	

3. Geologic Characteristics

Tertiary age volcanics - Rhyolite underlying Snake River Volcanics. Permissive for Bulk Tonnage for Gold and Silver. We are interested in the Rome, Oregon zeolite deposit and currently have unpatented claims and/or fee leases at these locations: R41E, T.31S., Sec. 20, 29; R41E, T.32S., Sec. 8. 17. This is approximately 7 miles west of the northern end of the proposed wilderness area.

4. Energy/Mineral Potential evaluation and basis for interpretation

Tertiary silicic rocks are amenable to host similar Au Ag deposits as those found in the Delamar (Idaho) Mining District as well as uranium and mercury deposits similar to the Midnight Mining District (Mcdermitt, Nevada).

( ) If more information is available please put a check

5. References

Mineral and Water Resources of Idaho - Sp. Report No. 1, 1964

7. For more information contact (name)	Address (include zip code)	Telephone Number (include area code)
J. R. Mitchell Atlantic Richfield Company	555 17th Street Denver, CO 80202	(303) 293-7577

Form 3030-2 (June 1983)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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BASED UPON FORM APPROVED OMB NO. 1004-0129

ENERGY AND MINERAL RESOURCES EVALUATION

1. State: Idaho, Nevada, Oregon
b. County:
c. District:
d. Resource Area: Owyhee Canyonlands
e. Planning Unit:
f. Wilderness Study Area Name: Owyhee Canyon
Number: NV-010-106 (16-49E)

2. RESOURCES
List Names of Resources

NONFUELS	FUELS
Barite	
Gold	
Silver	

3. Geologic Characteristics

Snake River basalts overlie Tertiary age volcanic, volcaniclastic, and rhyolite flows. Permissive for bulk tonnage for gold and silver.

4. Energy/Mineral Potential evaluation and basis for interpretation

Tertiary age volcanic sequence has the potential (moderate to strong) of hosting similar Au and Ag deposits as those presently being explored in the Delamar Mining District.

( ) If more information is available please put a check

5. References

Mineral and Water Resources of Idaho, Sp. Report No. 1, Nov. 1964
Geology and Ore Deposits of the Silver City - Delamar Flint Region - Pamphlet No. 161
Idaho Bureau of Mines and Geology, 1973

7. For more information contact (name)	Address (include zip code)	Telephone Number (include area code)
J. R. Mitchell Atlantic Richfield Company	555 17th Street Denver, CO 80202	(303) 293-7577

Form 3030-2 (June 1983)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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BASED UPON FORM APPROVED OMB NO. 1004-0129

ENERGY AND MINERAL RESOURCES EVALUATION

1. State: Idaho, Nevada, Oregon
b. County:
c. District:
d. Resource Area: Owyhee Canyonlands
e. Planning Unit:
f. Wilderness Study Area Name: Juniper Creek
Number: ID-16-52 (16-49A)

2. RESOURCES
List Names of Resources

NONFUELS	FUELS
Barite	
Gold	
Silver	

3. Geologic Characteristics

Snake River basalts overlie Tertiary age volcanic, volcaniclastic, and rhyolite flows.

4. Energy/Mineral Potential evaluation and basis for interpretation

Tertiary age volcanic sequence has the potential (moderate to strong) of hosting similar Au and Ag deposits as those presently being explored in the Delamar Mining District.

( ) If more information is available please put a check

5. References

Mineral and Water Resources of Idaho, Sp. Report No. 1, Nov. 1964
Geology and Ore Deposits of the Silver City - Delamar Flint Region - Pamphlet No. 161
Idaho Bureau of Mines and Geology, 1973

7. For more information contact (name)	Address (include zip code)	Telephone Number (include area code)
J. R. Mitchell Atlantic Richfield Company	555 17th Street Denver, CO 80202	(303) 293-7577

Form 3030-2 (June 1983)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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BASED UPON FORM APPROVED OMB NO. 1004-0129

ENERGY AND MINERAL RESOURCES EVALUATION

1. State: Idaho, Nevada, Oregon
b. County:
c. District:
d. Resource Area: Owyhee Canyonlands
e. Planning Unit:
f. Wilderness Study Area Name: Little Owyhee River
Number: ID-16-48C

2. RESOURCES
List Names of Resources

NONFUELS	FUELS
Barite	
Gold	
Silver	

3. Geologic Characteristics

Snake River basalts overlie Tertiary age volcanic, volcaniclastic, and rhyolite flows.

4. Energy/Mineral Potential evaluation and basis for interpretation

Tertiary age volcanic sequence has the potential (moderate to strong) of hosting similar Au and Ag deposits as those presently being explored in the Delamar Mining District.

( ) If more information is available please put a check

5. References

Mineral and Water Resources of Idaho, Sp. Report No. 1, Nov. 1964
Geology and Ore Deposits of the Silver City - Delamar Flint Region - Pamphlet No. 161
Idaho Bureau of Mines and Geology, 1973

7. For more information contact (name)	Address (include zip code)	Telephone Number (include area code)
J. R. Mitchell Atlantic Richfield Company	555 17th Street Denver, CO 80202	(303) 293-7577

Form 3030-2 (June 1983)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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BASED UPON FORM APPROVED OMB NO. 1004-0129

ENERGY AND MINERAL RESOURCES EVALUATION

1. State: Idaho, Nevada, Oregon
b. County:
c. District:
d. Resource Area: Owyhee Canyonlands
e. Planning Unit:
f. Wilderness Study Area Name: South Fork Owyhee River
Number: ID-16-53 (16-49D)

2. RESOURCES
List Names of Resources

NONFUELS	FUELS
Barite	
Gold	
Silver	

3. Geologic Characteristics

Snake River basalts overlie Tertiary age volcanic, volcaniclastic, and rhyolite flows.

4. Energy/Mineral Potential evaluation and basis for interpretation

Tertiary age volcanic sequence has the potential (moderate to strong) of hosting similar Au and Ag deposits as those presently being explored in the Delamar Mining District.

( ) If more information is available please put a check

5. References

Mineral and Water Resources of Idaho, Sp. Report No. 1, Nov. 1964
Geology and Ore Deposits of the Silver City - Delamar Flint Region - Pamphlet No. 161
Idaho Bureau of Mines and Geology, 1973

7. For more information contact (name)	Address (include zip code)	Telephone Number (include area code)
J. R. Mitchell Atlantic Richfield Company	555 17th Street Denver, CO 80202	(303) 293-7577

Oregon Natural Resources Council

— formerly the Oregon Wilderness Coalition —

Eastern Oregon Field Office, Box 9, Prairie City, Oregon 97869 (503) 820-3714

Tim Lillebo

Martin Zimmer
Boise District Manager

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Dear Sirs,

I have received the Owyhee Canyonlands Wilderness (OCW) EIS and appreciate the opportunity to comment. My comments will be the scattergun approach, which brings to mind the fabulous chukar hunting in parts of the area. My experience comes from extensive backpack hunting (deer + chukar) and river floating the Owyhee.

The EIS recommends a fair wilderness designation and the BLM deserves commendation for its recognition of wilderness values. I have always felt that a truely large and wild wilderness in the Owyhee country would be just and appropriate; therefore I am recommending a much larger wilderness plan which includes closing roads and designating additional wilderness areas. We need a wilderness that's big enough to get lost in and stay a spell. This large wilderness must include all the plateau areas. It's fine to have the heart and arteries (canyons) as wilderness, but you've got to have the body (plateaus) as well for the entire being (ecosystem).

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be used to supervise livestock (page IV-16) further reinforces the incompatibility of grazing and wilderness. The 63 jobs attributed to cattle grazing is an insignificant number when compared to the significance of the area as a wilderness of national importance.

In summary, the DEIS as it stands is unsatisfactory. The original WSA's do not include areas in the upper watersheds critical to maintaining water quality. Their boundaries are frequently too close to the river canyon to insure protection for the numerous species of wildlife that together give the Owyhee a special character. Wildlife studies, if they exist, are not cited. No studies are mentioned that address the question of minimum wilderness size necessary to maintain viable populations of wildlife. There is no mention of the consequences of major developments on non-WSA land near the river on the wilderness quality of the canyonlands. And finally, grazing would be allowed to continue and increase even under the "All Wilderness" proposal, even though grazing and wilderness are incompatible for a number of reasons. .5

The Owyhee River watershed contains the largest roadless area left in the united States outside Alaska. The opportunity for preserving an area of true wilderness character is unparalleled. The economic potential of the area is very low, especially when compared to the increase in income which can be expected with the designation of the area as wilderness and its subsequent discovery by thousands of hunters and recreationists. It is my firm belief that the entire Owyhee is eligible for wilderness, with the complete expulsion of cattle mandatory. In any case, cattle must be banned from any wilderness finally designated even if that means severe reductions in cattle on adjacent lands and fair compensation for ranchers by the federal government. A wilderness of national significance must not be compromised for the benefit of only a few.

Thank you again for allowing my comments to be heard. I trust they will be taken seriously. Please send me a copy of the final EIS.

Sincerely,

Robert Deering

Robert Deering
133 NW 18th #203
Portland, OR 97209

May 31, 1984

Bureau of Land Management
Owyhee Canyonlands EIS
3948 Development Avenue
Boise, Idaho 83705

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Dear Sirs,

Thank you for a copy of the Owyhee Canyonlands Wilderness DEIS and the opportunity to comment on this important decision.

I'll begin by registering my dismay at the inadequacy of the original WSA's. Specifically, the exclusion of virtually all of the headwaters of the Owyhee watershed reveals a naive understanding of the ecology of the river, a basic consideration in designating wilderness. If the upper reaches of the main streams and tributaries remain unprotected, how can the water cuality in the canyonlands reflect wilderness cuality? The total watershed must be included in the wilderness system. Why is the North Fork of the Owyhee completely left out? This makes no sense. .01

Secondly, the WSA's as they stand may not adequately furnish enough support for the numerous species of wildlife which live in the canyon area and lend the Owyhee much of its wilderness character. Along many miles of river, mostly in WSA OR-3-195, the river canyon forms the border of the WSA. Apparently a large portion of the river would have only 1-2 miles on either side included in wilderness. Do these areas provide enough summer forage for mule deer? Will nesting raptors have rodent populations under protection sufficient for their needs? The DEIS provides general statements concerning the welfare of wildlife species; although studies are mentioned none are cited. The suggestion is that mineral and energy developments (and grazing) conflict with wildlife, especially over long periods of time. Yet the boundaries of many sections of WSA are very close to the river, allowing the potential for developments right up to these boundaries. Nowhere does the DEIS discuss the impact of development on nondesignated lands on wildlife. The final decision must take into account the interdependent mosaic of wildlife species, their ecological requirements, and the effects of development on their populations. Maintenance of viable wildlife populations is key to preserving the wilderness character of the Owyhee Canyonlands, a prime responsibility of the EIS and the BLM. .02 .03

A very serious problem involves livestock grazing inside the WSA's. Wilderness and cattle grazing are simply not compatible. Anyone who has seen hillsides crisscrossed by cow paths and cows scattered over the countryside knows they are not in the wilderness. Grazing is destructive to the landscape, is the "single greatest input for nonpoint source water pollution below the Reservation" (page III-14), and demands the maintenance and implementation of development projects (Table II-2) that are also completely incompatible with wilderness. The suggestion that motor vehicles will .04

DEPARTMENT OF THE AIR FORCE
REGIONAL CIVIL ENGINEER, WESTERN REGION (AFESC)
630 SANSOME STREET - ROOM 1316
SAN FRANCISCO, CALIFORNIA 94111

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REPLY TO ATTN OF: ROV (Cox/556-6439)

SUBJECT: Owyhee Canyonlands Wilderness Draft Environmental Impact Statement (DEIS)

TO: Mr. Martin J. Zimmer, District Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, ID 83705

1. We have reviewed the Owyhee Canyonlands Wilderness DEIS and offer the following comments:

a. As you are aware, some of the areas under consideration as wilderness areas are subject to military overflights. Historically, there have not been any major problems between the Air Force (AF) and the Bureau of Land Management (BLM) concerning military overflights of lands under consideration for wilderness designation. However, should a conflict arise, as mentioned on page IV-2, the establishment of proper liaison between the BLM and our office should be provided for in accordance with the Wilderness Management Policy.

b. Mission requirements, fuel costs, and environmental constraints are considered in the decision to locate a military air training activity. Areas which are appropriate for military overflights and low altitude training routes are becoming increasingly rare. Desirable characteristics include: relatively isolated locations, areas of sparse populations, areas presently under federal jurisdiction, diverse topography, and areas which lack heavy commercial activities such as mining. These characteristics include many areas that have potential for wilderness designation. Therefore, the Air Force supports wilderness designations provided no significant restrictions are placed on military overflights. We consider wilderness areas to be a resource and overflights, to a certain degree, a compatible use of that resource. If, however, this use is determined to be a conflict because of frequency, noise levels, or duration of overflights, then it will be necessary to more fully document their impacts on the wilderness user.

c. At present, a draft Air Force regulation concerning overflights and noise is being finalized. Included in this proposed regulation is the comment that efforts should be made to avoid recreational and special land use areas. Therefore, we will work with your organization in identifying and resolving any conflicts where possible. However, it is essential that designation and management of proposed wilderness areas not restrict the use of airspace by the Air Force.

2. We appreciate this opportunity to comment and this DEIS. If we can be of assistance in coordinating any correspondence or meetings, please contact Mr. William Cox of our staff at (415) 556-6439.

Phillip E. Lammi

PHILLIP E. LAMMI, Chief
Environmental Planning Division

cc: AF/LEEVX
AFESC/DEV

Martin J. Zimmerman
Bureau of Land Management
3948 Development Ave
Boise, ID 83705

May 10, 1984

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Dear Sir —

I am pleased to hear that BLM is proposing wilderness designation for the Owyhee River Canyonlands, however I am concerned over some of the boundary changes included in the proposal which would adversely affect native wildlife of the canyon itself. Specifically the planting of crested wheatgrass will most likely result in decreases in a variety of vertebrate populations which are linked to riparian of the canyon as food resources. Research by C. Trost and T. Reynolds of ~~Idaho~~ State University indicate such adverse impacts of crested wheatgrass plantings — the high plateaus adjacent to the Owyhee Canyon is simply not an appropriate place for such range modifications. I urge you to reconsider including these out-of-canyon plateau regions in the wilderness or perhaps more importantly exclude crested wheatgrass plantings from the management plans. Farmland areas not adjacent to the canyon seems a more reasonable low-impact plan or perhaps plantings of native grasses could be a viable alternative to the damage clearly associated with grazing on crested wheatgrass plantings. .01

My sincere thanks for your consideration,

Owyhee River Fan

David B. Herbst
660 SW Adams
Corvallis OR 97333

window has been closed by a land management plan (see enclosed memo to Chief, Planning and Environmental Coordination Staff, BLM, Oregon State Office). This information reveals that costs and environmental impacts are substantially greater where major energy corridors must skirt large blocks of wilderness or wilderness study area lands. Such deviations may also impede future projects of significance to regional and national interests.

To emphasize the need for maintaining flexible corridor options, we have enclosed a recently completed study of potential interregional intertie corridors. This April 1984 Intertie Corridor Evaluation Report includes two north-south intertie alternatives (Plan 3 B/C) potentially affecting the Owyhee Canyonlands Study Area. The need for such corridors was not even recognized at the time of your scoping notice. The effect, if any, of wilderness designation on these corridors should be addressed in the Final EIS and presented to decisionmakers.

We are also concerned with the stipulation that any major corridor be limited to underground, which is a project design decision. This requirement does not take into consideration the costs, the environmental impacts, or the technical feasibility of undergrounding a major high voltage transmission line, particularly when adjacent to a gas pipeline. Such resbrictions could effectively eliminate the use of the corridor. The alternatives and their environmental tradeoffs should be evaluated before such design decisions are made. We have enclosed select portions of the Garrison-Spokane 500-kV Transmission Project EIS, which present the significant tradeoffs involved in undergrounding a major transmission line. We have also included a draft report prepared by Dames and Moore for BPA on the potential environmental impacts of underground cable systems. A similar evaluation should be done before decisions are made which limit the use of any corridor. Accordingly, we strongly recommend that the underground stipulation be removed from the Final EIS.

Again, we offer our assistance if needed. Wes Kvarsten, Director, Division of Land Resources, (503) 230-4683, would be glad to assist you in addressing our concerns.

Sincerely,

Anthony R. Morrell
Environmental Manager

Enclosures

cc: (w/o enclosures)
BLM Oregon State Office
William G. Leavell, Code 910

Clair M. Whitlock, State Director
Bureau of Land Management
Idaho State Office
3380 Americana Terrace
Boise ID 83706

John Cheek
c/o PP&L, Rm 700
920 SW 6th Avenue
Portland OR 97204

Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

In reply refer to: SJ

June 1, 1984

District Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, ID 83705

378

Dear Sir:

This letter responds to your request for comments on the Draft Owyhee Canyonlands Wilderness Environmental Impact Statement (EIS).

Bonneville Power Administration (BPA) has some strong concerns on how energy corridor options were handled in the Draft EIS. On February 14, 1983, we emphasized the importance of preserving future east-west corridor options (letter by Wes Kvarsten, Director, Division of Land Resources, in response to BLM scoping notice of December 21, 1982). In reviewing the Draft EIS, however, we find that only the All Manageable, Wildlife, and Canyonlands alternatives provide for corridors. In addition, the corridors are limited to a 1/4-mile width along the Northwest El Paso Gas pipeline and future construction is restricted to underground alternatives only. The EIS also states that other corridors were eliminated from consideration because they had not been considered in the management framework plans of the affected BLM Districts.

We are first concerned with the implication that any alternative arising after completion of a management framework plan must be discarded. We hope that this is not the case. BPA has worked closely with the Forest Service and BLM in responding to the corridor requirements of the Federal Land Management Policy Act (FLMPA). Through joint corridor planning, we have sought ways to minimize environmental impacts while keeping open corridor options for future generations. BPA and the Forest Service have concluded that future linear corridors should not be included in management plans until those corridors have been studied in detail and separately evaluated through the NEPA process, after a firm need has been established. However, BPA encourages the identification and preservation of "corridor windows." Since few windows remain through the Rocky and Cascade Mountains, preservation may require leaving small areas of corridor within wilderness areas. We realize that such tradeoffs are difficult, but they must be made. Windows have been unnecessarily closed in this Draft EIS. .01

Other BPA assistance to BLM and the Forest Service has included offering our transmission expertise to help identify locations and alternatives. We have provided cost estimate information on alternate locations when a corridor

EV

District Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

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Dear Sir:

Subject: Owyhee Canyonlands Wilderness EIS (8500)

This letter is written in response to your December 21, 1982, request for comments on the Owyhee Canyonlands Wilderness EIS.

Our primary concern is that the wilderness alternatives not foreclose the limited number of available east-west utility corridor options. Our review of the lands in question shows that there are two long-range east-west corridors which could be effected. These were presented in the Western Utility Group's Western Corridor Study. This study was presented to BLM several years ago and should be available in your State Office if you do not have a copy. The long-range need for these corridors was presented in the USFS/BPA "Pacific Northwest Long Range East-West Energy Corridor Study" completed in 1977. Although the current regional load forecasts do not show the urgency of such need, these limited options should not be foreclosed.

If we can assist your EIS team in addressing this concern, please let us know. Robert Goranson, Area Engineer in our Lower Snake River Area Office in Walla Walla, should be contacted at (509) 525-5500.

Sincerely,

Wesley J. Kvarsten
Director, Division of Land Resources

JOHooson:jh:lsp

cc:
J. Frick - E
C. Clark - EH
S. Perry - ET
M. Johns - ETJ
R. Goranson - OWE
L. Wilkerson - EVL
T. Murray - EVH
W. Mittelstadt - EO
Official File - EVH

Department of Energy
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208

J. Hoosen

EVH

OCT 14 1983

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Mr. Phillip C. Hamilton
Chief, Planning and Environmental
Coordination Staff
Bureau of Land Management
Oregon State Office
P.O. Box 2965
Portland, OR 97208

Dear Mr. Hamilton:

This letter is written in response to your request of September 22, 1983, regarding the effect of the Oregon Statewide Wilderness Environmental Impact Statement (EIS) on utility corridors.

As a result of our review of the 78 wilderness study areas (WSA's), we agree with Eric Stone's conclusions that of the 19 WSA's potentially affecting existing or potential utility corridors, only the Saddle Butte (3-111), Alvord (2-74F), and Basque Hills (2-84A) WSA's have the greatest potential for significant effect.

Of the remaining 16 WSA's, it appears they can be avoided at little or no increase in expense. We assume that no existing lines will have to be removed.

To assist in evaluating the economics of rerouting a corridor or relocating an existing utility line to avoid a WSA, we have enclosed the 1983 edition of the "Per Mile Cost Data for Preliminary Transmission Line Estimates." We have marked with an asterisk those designs which are most common in current BPA planning. We suggest that the 500-kV lattice tower single-circuit AC line and ±500-kV bipolar DC line with 3-Seahawk conductors be used for estimates on major east-west and north-south corridors. Yearly per mile maintenance costs for 500-kV AC construction will average around $880 and for DC, around $350. Based on current BPA value of losses, yearly energy losses per mile extra length will cost $14,000 for AC and $28,500 for DC construction. These estimates assume peak loadings of 1000 MW and 2000 MW respectively, and 70 percent load factor. For rerouting of a line, approximately 20 percent should be added to the transmission line capital costs to account for the use of additional dead-end structures where a circuitous location is required to avoid a wilderness area. If the removal of an existing line is required, we have found through experience that the cost of removal will average approximately 50 percent of the construction capital cost per mile.

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In terms of your forecast, [illegible] assumptions are [illegible] for [illegible] in the [illegible] EIS.

1. [illegible] to integrate [illegible] future geothermal, wind, solar, etc. and other electric generating facilities and/or new loads should be addressed at [illegible] projects or loads are proposed for [illegible]. [illegible] cooperatively [illegible] that time to [illegible] in accordance with [illegible] memorandum of [illegible].

2. Corridor widths [illegible] in the foreground recreation study areas should be kept at a minimum [illegible] feet. New lines constructed parallel to existing lines will be built on the appropriate side of existing line to avoid conflict with a WSA where the existing right-of-way parallels a WSA boundary.

3. In situations where wilderness study areas significantly affect a proposed long-range corridor, then the following alternatives and their impacts should be looked at: (a) establishment of corridor window through WSA; (b) relocation of corridor around WSA.

We agree that corridors should not be a major issue in your wilderness planning process. If, however, the issue should arise, we would like to be informed. We stand ready to assist in any studies or meetings that may be required. Your invitation to informally review the preliminary draft EIS sections dealing with corridors is appreciated. We encourage the inclusion of Pacific Power and Light in these reviews. We appreciate this early opportunity to provide input into the wilderness planning process. The efforts of Eric Stone have made our involvement much easier.

If we can be of any further assistance, please let us know. In that regard, John Hooson will continue to serve as our point of contact for long-range corridor planning.

Sincerely,

C. F. Clark
(Charles F. Clark)
Engineering Manager

Enclosures

JOHooson:lft:10-12-83 (WP-EVH-3421E)

cc:
J. J. Jura - A
M. Klinger - E
D. E. Perry - EO
R. B. Poon - EOFD
D. M. Porter - EOF
G. L. Jacobson - ET
M. C. Johns - ETJ
W. J. Kvarsten - EV
T. J. Murray - EVH
R. W. Beraud - EVHC
D. W. Schausten - O
G. E. Gwinnutt - OP
R. R. Goranson - OWE
A. R. Morrell - SJ
Circ. File - EV
Official File - EVH

July 6, 1983

UNITED STATES GOVERNMENT
Memorandum

ETC

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TO: Addressees

FROM: Flurry D. Stone, Lead Estimating Engineer
Program Analysis Staff - ETC

SUBJECT: Transmission Line Estimating Data

Attached is the 1983 edition of the "Per Mile Cost Data for Preliminary Transmission Line Estimates." In this year's edition, the high voltage section 500-kV and greater has been expanded to include flat and rolling terrain for 500-kV construction as well as 50% rolling/50% mountainous terrain. In addition, three new structure series have been added and are as follows:

a. Guyed 500-kV and 1100-kV cross rope suspension designs.

b. 1100-kV lattice steel construction.

c. 230-kV double circuit H-Frame wood-pole design.

Typical mile cost increases for the May 1983 edition averaged 9 percent for wood pole and no increase for steel. Cost for 500-Kv lattice steel typical mile actually decreased from last year. This reduction is due to (1) a lower unit price predicted for steel erection and (2) a reduction in total steel required caused by increasing average span length to 1400 feet from 1150 feet.

Explanatory notes for this year's edition are listed as follows:

1. Land costs are for areas west of the Cascades; for east of the Cascades, use 50 percent of the amount shown.

2. All wood, concrete, and steel pole construction is based on rolling terrain with 1/4-mile of new access road construction per mile of transmission line. Single-pole wood is used only in relatively flat terrain. All lattice steel construction is based on flat, rolling, and 50% rolling and 50% mountainous terrain, with 1/4-mile of new access road construction per mile of transmission line for rolling terrain and 1/2-mile for 50% rolling and 50% mountainous terrain. The new cross rope construction would use 1/4-mile of new access road construction per mile.

3. The per mile costs shown illustrate expected costs where the total length of wood and concrete pole lines is 10 miles and the total length for steel lines is 50 miles. Shorter lines may have substantially higher per mile costs.

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THIS DATA IS FOR PLANNING ONLY. Request estimates for specific projects from the Office of Engineering and Construction.

Attachment

Addressees:

Washington D.C. Office - AC (3)
Division of Financial Requirements - DN (1)
Office of Engineering & Construction - E (6)
Division of Construction - EK (5)
Division of Materials & Procurement - EM (2)
Division of System Engineering - EO (48)
Division of Transmission Engineering - ET (37)
Division of Land Resources - EV (4)
Office of Regional Operations O - (2)
Division of Maintenance - OH (1)
Upper Columbia Area - OK (5)
Montana District Office - OKK (1)
Wenatchee District Office - OKN (1)
Lower Columbia Area - OP (7)
Eugene District Office - OPG (1)
Puget Sound Area - OS (5)
Snake River Area - OW (1)
Idaho Falls District Office - OWI (2)

FDStone:lm (W:0048N)

cc:
Circ. File - ET
Official File - ETC

PER MILE COST DATA FOR PRELIMINARY TRANSMISSION LINE ESTIMATES — 07/01/83 — PAGE 1

ROLLING TERRAIN

VOLTAGE	115KV	115KV *	115KV *	115KV	115KV	115KV	115KV
STRUCTURES	SGL WOOD POLE SGL CIR	SGL WOOD POLE SGL CIR	SGL WOOD POLE SGL CIR	SGL WOOD POLE SGL CIR	SGL WOOD POLE SGL CIR	HF WOOD POLE SGL CIR	HF WOOD POLE SGL CIR
CONDUCTOR	PARTRIDGE	IBIS	ARBUTUS	DRAKE	NARCISSUS	PARTRIDGE	IBIS
RIGHT-OF-WAY WIDTH	50 FT	50 FT	55 FT	50 FT	50 FT	90 FT	90 FT
TONS OF STEEL OR NO OF POLES	12.0	13.0	15.0	15.5	17.0	13.6	15.0
EIS	$ 500	$ 500	$ 500	$ 500	$ 500	$ 1000	$ 1000
SURVEYS	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295
DESIGN	3070	3070	3070	3070	3070	3070	3070
MATERIALS							
TOWER STEEL & FOUNDATIONS	0	0	0	0	0	0	0
POLES - STEEL	0	0	0	0	0	0	0
WOOD	4430	4800	5540	5720	6270	5020	5540
CONCRETE	0	0	0	0	0	0	0
CROSSARMS & HARDWARE	1080	1180	1360	1410	1540	2260	2570
CONDUCTOR	5910	6140	10500	14709	16640	5980	6140
GROUNDWIRE & COUNTERPOISE	0	0	0	0	0	0	0
CONDUCTOR HARDWARE	1590	1910	2160	2380	2760	1070	1580
INSULATORS	7930	8620	9990	10340	11370	1560	1680
VIBRATION & SPACER DAMPERS	0	0	0	0	0	0	0
GUYS & ANCHORS	680	680	680	680	680	2210	2210
STORES EXPENSE	1060	1170	1510	1760	1960	980	990
TOTAL MATERIALS	22780	24490	31740	36990	41230	19060	20700
CONSTRUCTION							
TOWER STEEL & FOUNDATIONS	0	0	0	0	0	0	0
POLES - STEEL	0	0	0	0	0	0	0
WOOD	7210	7810	9020	9320	10220	8170	9020
CONCRETE	0	0	0	0	0	0	0
CROSSARMS & HARDWARE	2330	2520	2890	2980	3260	5340	6100
CONDUCTOR STRINGING	7200	7700	8050	8910	9300	7200	7700
GROUNDWIRE STRINGING	0	0	0	0	0	0	0
GUYS & ANCHORS	1170	1170	1170	1170	1170	4900	4900
INSPECTION	2690	2880	3170	3360	3590	3840	4160
TOTAL CONSTRUCTION	20600	22080	24290	25740	27530	29450	31860
SUBTOTAL	57240	60430	69890	76580	82630	62820	66930
LAND	41000	41000	42000	41000	41000	52000	52000
CLEARING & ACCESS ROADS	10960	10960	11380	10960	10960	13760	13760
SUBTOTAL	109200	112390	123190	128540	134590	128580	132690
ENG. OVERHEAD & ROUNDOUT 10.0%	10930	11260	12350	12890	13440	12440	13290
MS&A OVERHEAD	13670	13750	14160	13970	14070	17480	17620
TOTAL COST PER MILE	$ 133600	$ 137400	$ 149700	$ 155480	$ 162100	$ 158900	$ 163600

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PER MILE COST DATA FOR PRELIMINARY TRANSMISSION LINE ESTIMATES — 07/01/83 — PAGE 2

ROLLING TERRAIN

VOLTAGE	115KV	115 KV	115 KV *	230KV	230 KV *	230 KV	230KV *
STRUCTURES	HF WOOD POLE SGL CIR	HF WOOD POLE SGL CIR	HF WOOD POLE SGL CIR	HF WOOD POLE SGL CIR	HF WOOD POLE SGL CIR	HF WOOD POLE SGL CIR	HF WOOD POLE DBL CIR
CONDUCTOR	DRAKE	NARCISSUS	COWSLIP	DRAKE	NARCISSUS	COWSLIP	NARCISSUS
RIGHT-OF-WAY WIDTH	90 FT	90 FT	90 FT	100 FT	100 FT	100 FT	115 FT
TONS OF STEEL OR NO OF POLES	17.4	18.4	21.7	16.4	18.1	20.5	24.8
EIS	$ 1000	$ 1000	$ 1000	$ 1000	$ 1000	$ 1000	$ 1000
SURVEYS	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295
DESIGN	3070	3070	3070	3070	3070	3070	3070
MATERIALS							
TOWER STEEL & FOUNDATIONS	0	0	0	0	0	0	0
POLES - STEEL	0	0	0	0	0	0	0
WOOD	6420	6790	8010	8330	9190	10410	16760
CONCRETE	0	0	0	0	0	0	0
CROSSARMS & HARDWARE	3310	4190	5610	6240	6890	8400	11460
CONDUCTOR	14700	16640	26650	14700	16640	26650	33280
GROUNDWIRE & COUNTERPOISE	0	0	0	0	0	0	0
CONDUCTOR HARDWARE	2340	3210	5590	2660	2850	4830	4150
INSULATORS	1870	2210	2650	3560	4220	4950	17720
VIBRATION & SPACER DAMPERS	0	0	0	0	0	0	0
GUYS & ANCHORS	1930	2270	2720	2450	2530	2530	4260
STORES EXPENSE	1530	1770	2560	1890	2120	2850	4360
TOTAL MATERIALS	32110	37090	53760	39630	44440	59360	92050
CONSTRUCTION							
TOWER STEEL & FOUNDATIONS	0	0	0	0	0	0	0
POLES - STEEL	0	0	0	0	0	0	0
WOOD	10460	11050	13040	11080	12140	13750	16100
CONCRETE	0	0	0	0	0	0	0
CROSSARMS & HARDWARE	7520	8450	10380	8510	9348	5913	9820
CONDUCTOR STRINGING	8910	9300	11800	8910	9300	11800	14420
GROUNDWIRE STRINGING	0	0	0	0	0	0	0
GUYS & ANCHORS	5010	5970	6660	6110	6200	6200	6810
INSPECTION	4790	5220	6280	4580	4900	5660	7070
TOTAL CONSTRUCTION	36700	39990	48160	35118	37550	43480	54220
SUBTOTAL	83170	91450	116310	89110	96350	117600	168640
LAND	52000	52000	52000	56000	56000	56000	68000
CLEARING & ACCESS ROADS	13760	13760	13760	14460	14460	14460	15513
SUBTOTAL	148930	157210	182070	159570	166810	188060	236150
ENG. OVERHEAD & ROUNDOUT 10.0%	14860	15690	18250	15970	16690	19880	23630
MS&A OVERHEAD	17910	18100	18530	18660	19000	19548	21058
TOTAL COST PER MILE	$ 181700	$ 191000	$ 218900	$ 194400	$ 202500	$ 226200	$ 280800

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PER MILE COST DATA FOR PRELIMINARY TRANSMISSION LINE ESTIMATES — 07/01/83 — PAGE 4

FLAT TERRAIN-SINGLE CIRCUIT

VOLTAGE	500KV	500KV	500KV *	500KV	1100KV	1100KV
STRUCTURES	LATTICE	CROSSROPE	LATTICE	CROSSROPE	LATTICE	CROSSROPE
CONDUCTOR	3-BUNTING	3-BUNTING	3-SEAHAWK	3-SEAHAWK	6-THRASHER	6-THRASHER
RIGHT-OF-WAY WIDTH	115 FT	140 FT	135 FT	135 FT	210 FT	228 FT
TONS OF STEEL OR NO OF POLES	53.0	28.4	60.9	28.9	325.0	153.8
EIS	$ 1500	$ 1500	$ 1500	$ 1500	$ 1500	$ 1500
SURVEYS	$ 9305	$ 9305	$ 9305	$ 9305	$ 9305	$ 9305
DESIGN	2560	2440	2560	2440	2560	2440
MATERIALS						
TOWER STEEL & FOUNDATIONS	53000	34600	68900	35900	325000	175600
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR	52810	52630	83850	83850	271200	271200
GROUNDWIRE & COUNTERPOISE	4090	4390	4090	4390	4090	4390
CONDUCTOR HARDWARE	4530	3910	4530	3918	11460	8908
INSULATORS	10310	5528	11130	5340	136470	152010
VIBRATION & SPACER DAMPERS	4150	3910	6550	3918	21050	21050
GUYS & ANCHORS	0	9980	0	9980	0	130340
STORES EXPENSE	9100	7490	11700	9160	54710	46958
TOTAL MATERIALS	138010	122620	184740	156430	824000	810448
CONSTRUCTION						
TOWER STEEL & FOUNDATIONS	54060	23000	62120	23410	331500	123938
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR STRINGING	17310	17310	21420	21420	55020	55020
GROUNDWIRE STRINGING	3080	3150	3080	3150	3080	3150
GUYS & ANCHORS	0	19060	0	19060	0	23028
INSPECTION	11170	9380	12990	10060	50440	30898
TOTAL CONSTRUCTION	85620	71900	99610	77090	448040	236518
SUBTOTAL	237800	207770	297720	246770	1285418	1068588
LAND	30000	34438	28500	33670	49770	51258
CLEARING & ACCESS ROADS	5250	5873	5000	5748	7620	7871
SUBTOTAL	272250	248448	331220	286188	1342808	1119628
ENG. OVERHEAD & ROUNDOUT 10.0%	27270	24870	33150	28598	134300	111938
MS&A OVERHEAD	14980	15390	15430	15414	41400	29350
TOTAL COST PER MILE	$ 314500	$ 288700	$ 379800	$ 330200	$1518500	$1260988

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PER MILE COST DATA FOR PRELIMINARY TRANSMISSION LINE ESTIMATES — 07/06/83 — PAGE 5

50% ROLLING / 50% MOUNTAIN

VOLTAGE	115KV	115KV	230KV	230KV	230 KV *	230 KV *
STRUCTURES	SGL CIR STEEL 10 SERIES	DBL CIR STEEL 1 SERIES	SGL CIR STEEL 2 & 22C SERIES	DBL CIR STEEL 3 & 23L SERIES	SGL CIR STEEL 12 SERIES	DBL CIR STEEL 13 SERIES
CONDUCTOR	DRAKE	DRAKE	DRAKE	DRAKE	BUNTING	BUNTING
RIGHT-OF-WAY WIDTH	110 FT	115 FT	125 FT	125 FT	110 FT	125 FT
TONS OF STEEL OR NO OF POLES	25.0	28.2	29.6	55.6	37.8	61.2
EIS	$ 1500	$ 5000	$ 1500	$ 5000	$ 1500	$ 5000
SURVEYS	$ 11660	$ 11660	$ 11660	$ 11660	$ 11660	$ 11660
DESIGN	2560	2560	2560	2560	2560	2560
MATERIALS						
TOWER STEEL & FOUNDATIONS	25000	36150	24600	55600	37810	61210
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR	14708	29410	14708	29410	17610	35220
GROUNDWIRE & COUNTERPOISE	0	0	0	0	0	0
CONDUCTOR HARDWARE	1440	2960	1440	2960	2310	4230
INSULATORS	1110	2220	2350	4730	3770	7550
VIBRATION & SPACER DAMPERS	410	820	210	410	250	500
GUYS & ANCHORS	0	0	0	0	0	0
STORES EXPENSE	3390	4540	3900	7440	4990	8520
TOTAL MATERIALS	46098	79140	52240	100550	66730	117620
CONSTRUCTION						
TOWER STEEL & FOUNDATIONS	25500	38810	30190	56710	39570	62430
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR STRINGING	6910	13600	6910	13600	10000	15500
GROUNDWIRE STRINGING	0	0	0	0	0	0
GUYS & ANCHORS	0	0	0	0	0	0
INSPECTION	5160	7910	5460	10580	7240	11690
TOTAL CONSTRUCTION	39570	60620	44960	81090	55450	89620
SUBTOTAL	101140	154990	112910	200860	133100	226470
LAND	59000	60000	67000	67000	59030	63000
CLEARING & ACCESS ROADS	32620	33095	34010	34010	32620	34010
SUBTOTAL	193000	252070	209940	297870	220970	323480
ENG. OVERHEAD & ROUNDOUT 10.0%	19258	25200	21030	29830	22070	32310
MS&A OVERHEAD	21950	25930	23210	27800	22910	28410
TOTAL COST PER MILE	$ 234200	$ 303200	$ 254200	$ 355500	$ 275800	$ 384100

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PER MILE COST DATA FOR PRELIMINARY TRANSMISSION LINE ESTIMATES — 07/06/83 — PAGE 6

50% ROLLING / 50% MOUNTAIN

VOLTAGE STRUCTURES	500KV SGL CIR STEEL 33A SERIES	500KV SGL CIR STEEL 21A SERIES	500KV DBL CIR STEEL 19 SERIES	500KV DBL CIR STEEL 19 SERIES	1100KV SGL CIR STEEL
CONDUCTOR	3-BUNTING	3-SEAHAWK	3-BUNTING	3-SEAHAWK	8-THRASHER
RIGHT-OF-WAY WIDTH	115 FT	105 FT	135 FT	125 FT	165 FT
TONS OF STEEL OR NO OF POLES	59.4	75.1	151.0	151.0	440.0
EIS	$ 1500	$ 1500	$ 5000	$ 5000	$ 1500
SURVEYS	$ 11660	$ 11660	$ 11660	$ 11660	$ 11660
DESIGN	2560	2560	2560	2560	2560
MATERIALS					
TOWER STEEL & FOUNDATIONS	50400	75100	151000	151000	440000
POLES - STEEL	0	0	0	0	0
WOOD	0	0	0	0	0
CONCRETE	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0
CONDUCTOR	52830	83450	185660	167700	271200
GROUNDWIRE & COUNTERPOISE	4090	4090	2090	2090	4470
CONDUCTOR HARDWARE	6640	6640	13290	13290	15230
INSULATORS	11480	14060	22930	28090	160080
VIBRATION & SPACER DAMPERS	4150	4550	4550	6470	21050
GUYS & ANCHORS	0	0	0	0	0
STORES EXPENSE	9940	13370	22730	26080	67600
TOTAL MATERIALS	144930	205660	326240	346720	979550
CONSTRUCTION					
TOWER STEEL & FOUNDATIONS	61000	76600	154020	154020	448800
POLES - STEEL	0	0	0	0	0
WOOD	0	0	0	0	0
CONCRETE	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0
CONDUCTOR STRINGING	17310	21420	26430	33200	55020
GROUNDWIRE STRINGING	3040	3040	1120	1120	3660
GUYS & ANCHORS	0	0	0	0	0
INSPECTION	12210	15170	27600	28550	76150
TOTAL CONSTRUCTION	93600	116270	211570	216890	583630
SUBTOTAL	258240	337640	557030	636430	1579100
LAND	60000	57000	66500	63000	42000
CLEARING & ACCESS ROADS	33090	32160	34940	34010	37715
SUBTOTAL	351330	426800	658470	731440	1659810
IND. OVERHEAD & FOUNDOUT 10.0%	35150	42680	65920	73170	165920
MS&A OVERHEAD	25420	25920	36410	35490	99070
TOTAL COST PER MILE	$ 411900	$ 495400	$ 760700	$ 840900	$1924800

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PER MILE COST DATA FOR PRELIMINARY TRANSMISSION LINE ESTIMATES — 07/06/83 — PAGE 5

ROLLING TERRAIN-SINGLE CIRCUIT

VOLTAGE STRUCTURES	500KV LATTICE	500KV CROSSROPE	500KV LATTICE	500KV CROSSROPE	1100KV LATTICE	1100KV CROSSROPE
CONDUCTOR	3-BUNTING	3-BUNTING	3-SEAHAWK	3-SEAHAWK	8-THRASHER	8-THRASHER
RIGHT-OF-WAY WIDTH	115 FT	140 FT	105 FT	135 FT	210 FT	220 FT
TONS OF STEEL OR NO OF POLES	58.7	30.5	71.3	32.2	405.1	158.9
EIS	$ 1500	$ 1500	$ 1500	$ 1500	$ 1500	$ 1500
SURVEYS	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295	$ 10295
DESIGN	2560	2440	2560	2440	2560	2440
MATERIALS						
TOWER STEEL & FOUNDATIONS	58700	38100	71300	40780	405100	185800
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR	52830	52830	83850	83850	271200	271200
GROUNDWIRE & COUNTERPOISE	4090	4390	4090	4390	4090	4390
CONDUCTOR HARDWARE	6640	4610	6640	4610	15230	10510
INSULATORS	11480	6140	14860	5960	160800	166480
VIBRATION & SPACER DAMPERS	8060	3918	8550	3910	21050	21050
GUYS & ANCHORS	0	9729	0	9729	0	126020
STORES EXPENSE	10020	7890	12990	9698	84090	48529
TOTAL MATERIALS	151820	127600	201480	162830	940750	831978
CONSTRUCTION						
TOWER STEEL & FOUNDATIONS	59870	24710	72730	26040	413200	162889
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR STRINGING	17310	17310	21420	21420	55020	55020
GROUNDWIRE STRINGING	3080	3150	3080	3150	3080	3150
GUYS & ANCHORS	0	10760	0	10760	0	23188
INSPECTION	12040	9590	14580	10410	70700	36510
TOTAL CONSTRUCTION	92300	73520	111810	79830	542000	279948
SUBTOTAL	256480	215350	327640	256980	1497110	1128158
LAND	60000	69600	57000	67340	94540	102580
CLEARING & ACCESS ROADS	15513	17265	14810	16915	22200	22908
SUBTOTAL	333990	302220	399450	341150	1613650	1253558
IND. OVERHEAD & FOUNDOUT 10.0%	33420	30230	39910	34100	161430	125348
MS&A OVERHEAD	23390	24759	23740	24990	58920	45510
TOTAL COST PER MILE	$ 390800	$ 357200	$ 463100	$ 400300	$1834200	$1424400

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V-82

for
Main Grid Substation Components & Transmission Lines
O&M Averaged for 1980, 1981, and 1982

	Number of Units	Maintenance: Direct	Maintenance: Indirect	Maintenance: Station Compl	Operations: Direct	Operations: Indirect	Total O & M	A & G	Total Expense	Average Service Life
Main Grid Substation Components										
500 kV PCB Terminal	133	$20,310	$ 532	$2,425	$ 9,203	$ 3,481	$35,951	$ 5,392	$ 41,343	28
230 kV PCB Terminal	334	5,759	158	730	3,043	1,143	10,833	1,624	12,457	28
500/230 kV Transformation	19	28,965	1,245	5,723	33,275	9,557	78,765	11,815	90,580	28
230/115 kV Transformation	51	9,581	261	2,271	15,616	5,345	33,074	4,961	38,035	28
230/LV Transformation	55	3,537	87	406	1,979	700	6,707	1,010	7,805	28
500 kV Shunt Reactors	3,360,000 kvar	.061	.0019	.0046	.0586	.0219	.140	.022	.170	28
230 kV Shunt Reactors	960,000 kvar	.061	.0019	.0046	.0586	.0219	.140	.022	.170	28
Series Capacitors	1,521,760 kvar	.108	.002	.031	.190	.071	.402	.073	.555	28
Shunt Capacitors	8,365,960 kvar	.094	.003	.028	.190	.071	.386	.058	.466	28
Transmission Lines	Ckt. Miles									
600 kV Direct Current	264.4 Mi	352	--	--	45	--	397	92	489	30
500 kV Steel	3,589.4 Mi	680	--	--	111	--	991	227	1,218	30
345/345 kV Steel	5,163.1 Mi	996	--	--	126	--	1,122	260	1,382	30
115/230 kV Wood	3,972.5 Mi	1,847	--	--	231	--	2,078	473	2,551	30

Division of Managerial Accounting
Haynes:nk:6463A:6-22-83

3178

MARCH 1983 PER MILE COST DATA FOR PRELIMINARY TRANSMISSION LINE ESTIMATES — 07/18/83 — PAGE 9

DHV DIP, CURRENT, FLAT, ROLLING, 50-50 V-STRING ON +-400kv+-750KV, I-STRING ON ALL OTHER VOLTAGES.

VOLTAGE STRUCTURES	±500KV DIRECT CURRENT FLAT 2-3/8" STL 2-THRASHER	±500KV DIRECT CURRENT ROLLING 2-3/8" STL 2-THRASHER	±500KV DIRECT CURRENT 50-50 2-3/8" STL 2-THRASHER	±500KV DIRECT CURRENT FLAT 2-3/8" STL 3-SEAHAWK	±500KV DIRECT CURRENT ROLLING 2-3/8" STL 3-SEAHAWK	±500KV DIRECT CURRENT 50-50 2-3/8" STL 3-SEAHAWK
CONDUCTOR						
RIGHT-OF-WAY WIDTH	120 FT	120 FT	120 FT	120 FT	120 FT	120 FT
TONS OF STEEL OR NO OF POLES	31.6	42.5	48.6	39.6	58.2	57.5
EIS	$ 1500	$ 1500	$ 1500	$ 1500	$ 1500	$ 1500
SURVEYS	$ 9300	$ 10300	$ 11660	$ 9300	$ 10300	$ 11660
DESIGN	2560	2560	2560	2560	2560	2560
MATERIALS						
TOWER STEEL & FOUNDATIONS	33400	42500	48600	39600	50200	57500
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR	45200	45200	45200	55300	55300	55300
GROUNDWIRE & COUNTERPOISE	3070	3070	3070	3070	3070	3070
CONDUCTOR HARDWARE	2110	2650	2650	3600	5070	5070
INSULATORS	5740	8230	8230	5740	8230	8230
VIBRATION & SPACER DAMPERS	7840	2040	2040	2800	2800	2800
GUYS & ANCHORS	0	0	0	7	0	0
STORES EXPENSE	6270	7310	7920	7520	8770	9580
TOTAL MATERIALS	98030	111000	117710	118240	134240	142070
CONSTRUCTION						
TOWER STEEL & FOUNDATIONS	34270	43350	49570	40390	51200	58650
POLES - STEEL	0	0	0	0	0	0
WOOD	0	0	0	0	0	0
CONCRETE	0	0	0	0	0	0
CROSSARMS & HARDWARE	0	0	0	0	0	0
CONDUCTOR STRINGING	12690	12690	12690	14280	14280	14280
GROUNDWIRE STRINGING	3860	3860	3860	3860	3860	3160
GUYS & ANCHORS	0	0	0	0	0	0
INSPECTION	7628	8980	9920	8780	10480	11520
TOTAL CONSTRUCTION	58448	68880	76040	67310	79740	88310
SUBTOTAL	189830	194240	209670	198910	226158	246180
LAND	31000	62000	62000	31000	62000	62000
CLEARING & ACCESS ROADS	5375	15860	33558	5375	15860	33550
SUBTOTAL	206210	272100	305820	235280	306010	341650
IND. OVERHEAD & FOUNDOUT 10.0%	20570	27200	30528	23510	30580	34198
MS&A OVERHEAD	13420	22100	25260	14198	22810	26060
TOTAL COST PER MILE	$ 240400	$ 321400	$ 360800	$ 273000	$ 359400	$ 401900

3178

RICHARD H. BRYAN
Governor

STATE OF NEVADA

DEPARTMENT OF MINERALS
400 W. King Street, Suite 100
Carson City, Nevada 89710
(702) 885-5050

May 31, 1984

382

Mr. Martin J. Zimmer
District Manager
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

We thank you for the opportunity to provide comment on the Owyhee Canyonlands Wilderness DEIS (SAI NV #84300073). Having had the opportunity to view the area, I certainly agree with the majority who expound the unique wilderness qualities of the canyonlands. However, at this time, the Nevada Department of Minerals cannot endorse any wilderness alternative, relative to that portion of the WSA within Nevada. There is simply not enough hard geologic data available on which to make a logical decision.

We concur with those comments furnished by the Nevada Bureau of Mines and Geology, one of which states that the mineral potential of the WSA in Nevada is presently "unknown".

As you know, the USGS recently completed a preliminary stream sediment sampling program in the Owyhee Canyonlands; these results are now pending. In addition, the USGS will be conducting another mineral potential evaluation which includes the Nevada portion of the WSA. The outcome of these programs should provide us with additional data on which to base a rational judgement.

Sincerely,

Thomas H. Burkhart
Resource Engineer

THB/kc

cc: Office of Community Services

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We appreciate the opportunity to review this report. Should you want to discuss EPA's comments, please contact Richard R. Thiel, Environmental Evaluation Branch Chief, at FTS 399-1728.

Sincerely,

for Robert S. Burd
Director, Water Division

cc: Loretta Barsamian, EPA R-9

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

REPLY TO ATTN OF: M/S 443

MAY 31 1984

384

Mr. Martin J. Zimmer
District Manager
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

The Environmental Protection Agency (EPA) has completed reviewing the Draft Environmental Impact Statement (DEIS) for the Owyhee Canyonlands Wilderness located along the Owyhee River in Malheur County, Oregon; Owyhee County, Idaho; and Elko County, Nevada. The DEIS analyzes four alternatives ranging from no wilderness to all wilderness in eight wilderness study areas. A total of 374,160 acres is proposed for wilderness designation.

The DEIS briefly identifies the plans for implementing the management objectives of the proposed action (Page II-2). Implementation and tracking of objectives needs to be described in greater detail in the Final EIS. For example, one of the goals in the proposed action (All Manageable Wilderness Alternative) is to: "Provide for long-term protection of soils and the watershed with particular emphasis on stream bank stabilization." The EIS should describe the steps that need to be taken in order to implement stream bank stabilization. Also, what measure will be used to determine if this goal has or has not been achieved? What is the implementation schedule? This type of detail should be included for implementation of all management objectives as appropriate. .01

Based on our review, we have rated the DEIS LO-1 [LO: Lack of Objections; 1: Adequate Information] in accordance with our responsibility under Section 309 of the Clean Air Act to determine whether the environmental impacts of proposed major Federal actions are acceptable in terms of public health, welfare, and environmental quality.

IDAHO AIR NATIONAL GUARD
124TH TACTICAL RECONNAISSANCE GROUP
BOISE AIR TERMINAL (GOWEN FIELD)
P. O. BOX 45, BOISE, IDAHO 83707

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Bureau of Land Management
Owyhee Canyonlands Wilderness/EIS

22 July 85

District Manager

1. The majority of the 374,160 acres in the eight Wilderness Study Areas (WSA's) underlie a significant portion of the Owyhee and Paradise Military Operations Areas (MOA's) and five Military Training Routes (MTR's), IR 302/VR 1304, VR 1300, VR 1301 and VR 1302. The Owyhee and Paradise MOA's have collectively vertical dimensions of 100 feet above ground level (AGL) to approximately 17,000 feet AGL. The VR (Visual Route) MTR's have vertical dimensions of 100 feet AGL to 1,500 feet AGL. The IR (Instrument Route) MTR has vertical dimensions of 100 feet AGL to approximately 7,000 feet AGL. Aircraft in the aforementioned areas fly ground speeds in excess of 600 knots. The MOA's and MTR's are scheduled by 366 TFW/DOTV (366 Tactical Fighter Wing) Mountain Home AFB, ID. and 124 TRG/DO (124 Tactical Reconnaissance Group) Boise, ID. respectively, and are used by numerous Air Force, Navy, Marine, National Guard and Reserve Units. Last year approximately 365 124 TRG missions were scheduled in the MOA's and 3548 missions were scheduled in the MTR's. The useage of the MTR's, Paradise and Owyhee MOA's has steadily increased since their creation in 1975, 1978 and 1981 respectively.

2. When MTR's and MOA's are established, noise sensitive areas and low altitude civil aircraft activity are considered and avoided to the maximum possible extent. For these reasons many remote and sparsely populated areas administered by National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management and or U.S. Forest Service become optimum low altitude flight training areas. Department of Defense (DOD) policy as stated in a circular from the Federal Aviation Administration (AC no 91-36A) specifically advises, "military aircraft may at times overfly areas managed by the Department of the Interior at altitudes lower than the recommended 2,000 foot minimum, but in compliance with the minimum safe altitudes prescribed in FAR 91-79. Such deviations will occur only when essential to the mission being conducted". Use of this airspace down to the minimum published altitude and at maximum ground speeds is essential in accomplishment of our tactical flight training mission and is in compliance with FAR 91-79 and DOD policy.

3. Therefore, the 124 TRG strongly objects to the proposed Wilderness Areas OR-3-195, ID-16-48B, ID-16-48C, ID-16-49A, ID-16-49D, ID-111-49E, ID-16-52, ID-16-53, NV-010-103A and NV-101-106 because of the conflict between the wilderness resource characteristic of solitude and our tactical flight training mission. We cannot subject our current airspace to possible reduction because of noise complaints generated by military aircraft performing their mission over conservationists and recreationalists located in the proposed Wilderness Areas.

ROBERT R. CORBELL II, COL, IDANG
Group Commander

1 atch
Cy to: AG State of Idaho

Owyhee Cattlemen's Association

0-2

Marsing, Idaho 83639

OWYHEE CATTLEMEN'S - RESPONSE TO OWYHEE CANYON
LAND WILDERNESS EIS DRAFT (February 1984)

The Final Report Environmental Statement of March 1979 considering the main stem of the Owyhee River for inclusion into the nations wild and scenic river system contained the following introductory statement signed by Secretary of the Interior Cecil D. Andrus, and National Park Service Director William J. Wallen;

> "As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned Public Land and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation..."

With this statement in mind we reject the Owyhee Canyon Lands Wilderness EIS Draft and propose a more manageable alternative which protects the real wild and scenic values for all public benefit. The absence of a WSR alternative seems inconsistent considering the broad based support for such a designation. This support spans all segments of government, river users, adjacent land owners, and conservation groups. We are concerned that there is not a Scenic and Wild River Alternative in the EIS and submit a 6th alternative.

Therefore, the Owyhee Cattlemen's Association proposes a Wild and Scenic River classification for the main stem of the Owyhee River from the northwest boundry of the Duck Valley Indian Reservation to the back waters of Lake Owyhee as proposed by the Vale District Bureau of Land Management which has jurisdiction over the eastern two thirds of the Owyhee. Alternative number 6 would extend from rim to rim and up tributaries one/fourth of a mile with the exception of the farm and ranch land at Rome, Oregon which would be excluded from designation. (see exhibit A which is a map of the proposed alternative)

Lands beyond our Wild and Scenic River alternative would continue to be managed under current multiple use. Senator Frank Church in a letter to Owyhee Cattlemen Action Committee Co-Chairman Dick Bass and Mike Hanley on February 7, 1980 had to say of wilderness and multiple use:

> "From our previous communications, you know that I do not believe that productive grazing land ought to be added to the National Wilderness System. I feel that our sagebrush lands should instead remain under normal multiple use management where the productivity of the land can be improved. You can be sure that I will not support the designation of large chunks of Owyhee County as wilderness."

We believe our alternative provides protection for the main stem of the Owyhee which has seen a sharp increase in recreation use over the past decade. It also provides the means to manage the lands adjacent to the river which would serve as a buffer zone between the river and the Multiple Use Lands beyond. Wildlife and livestock would continue to be managed using existing access routes.

There has never been a better friend of the Owyhee, or a person more knowledgeable of it than the late Dennis Swisher. Dennis who owned land and ranched at Crutcher Crossing floated the Owyhee and other western rivers which gave him an insight into the unique qualities of the Owyhee and the necessity of protecting it from overuse and abuse. Dennis was one of the first to propose Wild and Scenic River Classification for the Owyhee. His concerns were shared by Senator Church in a letter to Dennis on February 25, 1980:

> "I see absolutely no reason why the situation you envision--designation of the Owyhee as a wild and senic river and a complete continuation of existing grazing privileges--cannot be structured in the legislation dealing with this river. I agree with you that the law must be quite explicit. If the ground rules aren't clearly established at the outset, then the agency managing the river would have great latitude in administering the Owyhee and surrounding lands. I don't think we ought to give the BLM such discretion."

The Owyhee Cattlemen's proposal differs from Swisher's in that we extend Wild and Scenic River designation from rim to rim. He had proposed from rim to rim or 1/4 mile from the river where the canyon opens up at various points. Our reason for expanding the designation is that we feel a single classification of Wild and Scenic River would allow for flexability in management needed to cover future needs along the river.

Enclosed in our statement are the following exhibits which explain and support our 6th alternative to the Owyhee Canyon Lands Wilderness EIS Draft February 1984.

Exhibit A. Map of proposed area for Wild and Scenic River designation for the main stem of the Owyhee River.

Exhibit B. Letter from Dennis Swisher to Mr. Edward J. Kurtz National Park Service Pacific Northwest Region. June 26, 1978

Exhibit C. Letter from Senator James McClure to the Owyhee County Commissioners concerning "tremendous waste" of money involved in BLM wilderness studies. January 28, 1980

Exhibit D. Letter from Congressman Steve Symms to Ernie Bahem and his fellow Owyhee County Commissioners concerning Symm's attitude toward "..the environmental movement to lock up their (cattlemen's) grazing lands..." February 1, 1980

Exhibit E. Letter from Senator Church to Owyhee Cattlemen's Action Committee Co-Chairmen Dick Bass and Mike Hanley in which he says, "..I will not support the designation of large chunks of Owyhee County as wilderness." February 7, 1980

Exhibit F. Letter from Senator Church to Owyhee County Commissioners making the same statement as above in the letter to the Owyhee Cattlemen. February 7, 1980

Exhibit G. Letter from Senator Church to Dennis Swisher concerning designation of the Owyhee River as a Scenic and Wild River. February 25, 1980

Exhibit H. Letter from Dennis Swisher to Senator Robert Packwood concerning management of recreation use on the Owyhee River. January 7, 1983

Exhibit I. Letter from Oregon State BLM Director William Leavell to Senator Mark Hatfield concerning Dennis Swisher's correspondence on management of the Owyhee River. February 11, 1983

Exhibit J. Letter from Senator Hatfield to Dennis Swisher in which the senator stated he had introduced legislation on declaring the Owyhee River suitable for designation as a Wild and Scenic River. February 15, 1983

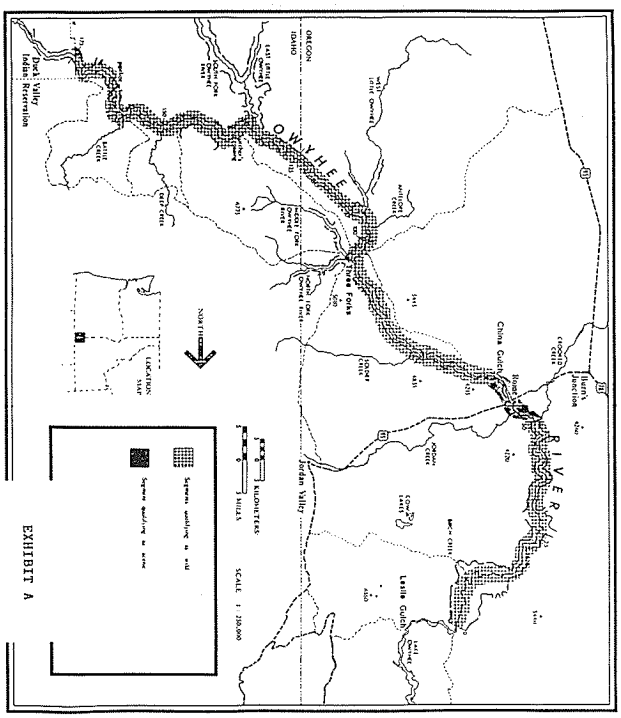
Exhibit K. Letter from Dennis Swisher to Senator Hatfield in which Dennis asks the senator to hurry action on the Wild and Senic River Designation for the Owyhee. February 22, 1983

Michael F. Hanley, IV
Co-Chairman Owyhee Cattlemen's Action Committee

Chad C. Gibson
Secretary, Owyhee Cattlemen's Association

MFH/CCG/gh

0-2



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Marked-up pages III-32 and III-33 of your report are enclosed. The following is a summary of the information provided in the enclosure.

a. The maximum storage capacity of the 306-foot-high dam is 202,000 acre-feet.

b. The Owyhee River on the Duck Valley Indian Reservation has an average annual runoff of 105,000 acre-feet with about 80,000 acre-feet being contributed to the Owyhee Reservoir from the Juniper Canyon damsite. Spring snowmelt during the months of March through June account for approximately 59 percent of the runoff to the reservoir.

c. The average summer flows from June 15 through September would range from 15 to 70 cfs. Average flows from October through March would range from 30 to 70 cfs.

d. The minimum average reservoir elevation occurs by June 15 of most years with a storage of 20,600 acre-feet. The reservoir would take approximately 3 to 20 years to fill. The fill operation would be the same as described above for a normal operation.

e. River fluctuations due to powerplant operations were not considered in this study. The operation for power was considered incidental, therefore, power production would be dependent on the releases necessary to maintain a minimum flow or meet the desired flow in the river below the dam.

f. The operation of the project would require some volume forecasting to estimate the total volume available between April 1 and June 15 each year. The volume forecast generally determines the release for the period of April through June 15. There are some instances where the storage in April or May will determine the releases for those months and the June release will be dependent on the June inflow only.

If you have any questions, please contact Mr. Witt Anderson at FTS 434-6633 or Mr. John Maxson at 434-6609.

Sincerely,

John L. McKern
Acting Chief, Planning Division

Enclosure

RECEIVED
Bureau of Land Management
Boise District
AUG 1 1986

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
BUILDING 602, CITY-COUNTY AIRPORT
WALLA WALLA, WASHINGTON 99362-9265
July 28, 1986

REPLY TO ATTENTION OF
Planning Division

393

Mr. Martin J. Zimmer
District Manager, Boise District
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

This is in response to your letter dated April 4, 1986 concerning a recreation oriented operation scenario for a reservoir at the Juniper Creek damsite. Project operation modeling has been time consuming and has resulted in the delay in our response.

The regulation of the Owyhee River was studied with the objective of maximizing recreational benefits on the river between Juniper Canyon damsite and the Rome, Oregon, gage. Flood regulation, power benefits, and reservoir recreation would be incidental and water rights are not considered.

During the period of April through June 15 each year, the minimum desired releases from the dam is 750 cubic feet per second (cfs) and the maximum desired release is 2,500 cfs. Releases between these values were maintained for the period except when there was not sufficient storage to maintain a minimum release of 750 cfs or during periods when the maximum release of 2,500 cfs would allow the reservoir storage to exceed the maximum capacity of 202,000 acre-feet. The other criterion used in determining the release at Juniper Canyon dam was the regulated flow at the Rome, Oregon, gage. The desired flow at the gage is in the range of 2,000 to 4,000 cfs. This criterion was met except during times when inflow between the dam and the Rome gage was greater than the 4,000 cfs or when either the storage at the dam was too small to provide flows above 2,000 cfs or the reservoir was full and the flows which would cause the reservoir storage to exceed 202,000 acre-feet were passed.

During July through October all inflow to the dam is released. The water stored from November through March would generally be released by June 15 to supplement the flow between the damsite and the Rome gage.

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
BUILDING 602, CITY-COUNTY AIRPORT
WALLA WALLA, WASHINGTON 99362-9265
October 6, 1986

REPLY TO ATTENTION OF
Planning Division

394

OCT 0 9 86

Mr. Martin J. Zimmer
District Manager, Boise District
Bureau of Land Management
3948 Development Avenue
Boise, Idaho 83705

Dear Mr. Zimmer:

Our preliminary study of the Juniper Canyon site on the East Fork of the Owyhee River (Sec. 19, T. 14 S., R. 1 W.) does not show that this would be an economically viable project under present conditions. Our study of a multipurpose project considered hydropower, flood control, flow enhancement, and irrigation.

The Corps of Engineers does not plan to study this site nor the Duck Valley site upstream (Sec. 19, T. 15 S., R. 1 W.), any further at this time.

Sincerely,

Gary G. McMichael
Acting Chief, Planning Division

RESPONSES TO WRITTEN COMMENTS

Response 10.1: The description of the affected environment and environmental consequences in the draft Owyhee Canyonlands Wilderness EIS refers only to those lands and waters located within the wilderness study areas (WSAs). Because of the low gradient of the Owyhee River, dams could be constructed within the Owyhee Canyonlands WSAs which would back water up into the western portion of the Duck Valley Indian Reservation. Wilderness designation would prevent the construction of such dams.

Wilderness designation of any of the Owyhee Canyonlands WSAs would not interfere with the planning or construction of proposed upstream dams located outside the boundaries of the WSAs, such as the Skull Creek Dam.

The wording in the final EIS has been changed to eliminate any confusion regarding upstream dam construction. The Shoshone-Paiute Tribes were added to the list of agencies solicited for comment.

Response 21.1: All WSA lands in the Owyhee Canyonlands are underlain with rhyolite. Only the WSA lands in and around the Louse Canyon-Toppin Creek Canyon area of WSA OR-3-195 have to date been found to have some moderate favorability for mineral resources (gold, silver and mercury). It is the judgement of the BLM that mineral exploration activities would occur on the affected lands at some future date should the lands remain open for mineral exploration. A scenario for exploration actions has been included for affected lands recommended as nonsuitable under the various alternatives in this EIS. However, it is not expected that mineral deposits of commercial worth would be found; hence, the affected lands are not excluded from the Proposed Action.

Response 146.01: Information regarding the "hot springs" theory for mineralization has been added to Chapter III of the final EIS. Impacts concerning this mineral potential have also been addressed in Chapter IV.

Response 156.01: The crested wheatgrass area (1,480 acres of non-WSA lands) in the vicinity of Indian Creek in WSA OR-3-195 has been removed from the Proposed Action and other wilderness alternatives presented in the final EIS.

Response 156.02: See response to comment 156.01. The BLM Wilderness Study Policy and subsequent study guidance memorandums define a "buffer zone" as nonwilderness land adjacent to designated wilderness which is managed in affect as a defacto wilderness. The study policy recognized the need for small expansions in wilderness area recommendations outside WSA boundaries to improve wilderness management. Such expansions are appropriate because of the prohibition on buffer zones. Wilderness areas should be as self-protecting as possible and include all lands necessary for the protection of wilderness values. Small BLM land additions lying within the original roadless inventory units of the Idaho WSAs have been retained in the Proposed Action and other wilderness proposals of the final EIS. The study policy and subsequent guidance memorandum also do not prohibit the closure of cherrystem roads to general public use. Such roads can be closed if the closure would enhance wilderness management opportunities.

Response 156.03: The impacts on opportunities for plateau solitude resulting from motor vehicle traffic on river access roads and cherrystem roads have been reevaluated under all alternatives in the final EIS. The analysis as presented in the draft EIS did appear biased.

Response 156.04: The discussion of mineral and oil/gas resources has been updated in Chapter III of the final EIS. Resource data indicates that mineral and energy resource exploration could impact wilderness characteristics in the WSAs. A revised analysis of impacts concerning exploration activities has been presented in Chapter IV of the final EIS.

Response 156.05: Both regional (Northwest) and state hydroelectric inventory documents have identified potential dam sites in Idaho: one each in WSAs ID-16-48B and 16-49D, and at two other locations within the Duck Valley Indian Reservoir in Idaho and Nevada. Since the release of the draft EIS the Army Corp of Engineers has been involved in preliminary feasibility studies for three of these sites (see Chapter I SCOPING AND ENVIRONMENTAL ISSUE IDENTIFICATION). These studies indicate that the potential sites are not feasible because of economic considerations and environmental constraints. Therefore, dam construction is not considered an issue in the final Owyhee Canyonlands Wilderness EIS.

Response 156.06: The Bureau is aware that the Wilderness Act of 1964 leaves the construction of water projects at the discretion of the President. That is why the Proposed Action and other wilderness alternatives presented in both the draft and final EIS specifically recommend maintaining the free-flowing condition of the Owyhee River system and would encourage such language in any enabling legislation for the Owyhee Canyonlands Wilderness should future economic condition change and warrant reconsideration of proposed dam sites (see response to 156.05).

Response 156.07: As stated in both the draft and final EIS, livestock grazing does not significantly impact known sensitive, threatened and endangered plant species because of the habitat locations of these species.

Response 156.08: Based upon the carrying capacity established for river recreation (boating) use, two starts per day can occur on the upper river above Three Forks, Oregon and four starts per day on the middle river between Three Forks and Rome, Oregon. On the upper river, this capacity would permit river groups to be about ten (10) miles apart above the confluence of the East Fork Owyhee River and South Fork Owyhee River and five (5) miles apart below the confluence. On the middle river, because of campsite availability on the first day of floating, river groups would generally be about two (2) miles apart or less. These visitor group separations are considered acceptable for retaining solitude opportunities on the river. This "interim" carrying capacity is subject to change if future research indicates. Projected use in 20 years is expected to reach 37% of the established carrying capacity (see Chapter II and IV of final EIS).

No carrying capacity for hunters or backpackers is currently established because their amount of use or distribution of use does not yet warrant a concern for resource degradation.

Response 156.09: Increases in recreation use since 1980 have not occurred at a rate equal to that prior to 1980. In fact, the amount of visitor use on the upper and middle river in recent years has been relatively stable. The designation of the Owyhee Canyonlands as a wilderness or wild river is expected to cause an increase in use but not at a rate occurring prior to 1980.

Response 156.10: By definition, primitive recreation must occur in a highly natural landscape where opportunities for solitude are of high quality. Semi-primitive motorized recreation use does not require as natural a setting nor as high a degree of solitude.

Response 156.11: The establishment of a wilderness study area (WSA) during the inventory process on public lands required that each unit contain within itself outstanding opportunities for solitude or outstanding opportunities for primitive recreation. All the Owyhee Canyonlands WSAs were found to have outstanding opportunities for solitude regardless of what additional WSA or non-WSA lands surrounded it; all but one WSA has outstanding primitive recreation opportunities. The assessment of external influences during the study process is permissible. Not only can external influences have a negative affect, they can have a positive impact. The Owyhee Canyonlands WSAs are considered to have an exceptionally high quality of solitude and/or primitive recreation opportunities because of the vast isolation of surrounding natural features. They are considered more valuable as wilderness than those WSAs which contain outstanding solitude and primitive recreation opportunities only because of natural features contained within their boundaries.

Response 156.12: Wilderness designation would have no significant impact on the continued use of affected private or state lands. Likewise, the use of non-federal lands is not expected to change enough to significantly affect wilderness management in general nor whitewater boating specifically.

Response 156.13: See response to comment 151.02.

Response 174.01: The draft EIS did support the designation of the Owyhee River as a wild river under the No Wilderness/No Action Alternative, however, it was not clearly stated. In the final EIS, both the Wild River (No Wilderness) Alternative and Wild River (No Action) Subalternative state that BLM supports the congressional designation of the Owyhee River as a wild river. Since the release of the draft EIS, the Owyhee River in Oregon WSA OR-3-195 has been formally designated a wild river by Congress. The analysis of the No Action (No Wilderness) Alternative/Subalternative in the final EIS reflects this designation.

Response 177.01: Additional information on dam proposals is presented in Chapter I of the final EIS. However, a detailed assessment of specific dam site study proposals for the Owyhee River are not made in Chapter IV of the final EIS because the Army Corp of Engineers has determined that dams within the Owyhee Canyonlands WSA are not feasible at this time (see response to 156.05).

Response 196.01: Costs of management were briefly addressed under the economic analysis (Chapter IV) in the draft EIS. Visitor management of canyon areas under the Proposed Action and other alternatives presented in the draft EIS were predicted to cost the same. The principal difference in visitor management costs between wilderness and nonwilderness designations concerns the patrol and protection of plateau lands in any designated wilderness area. This was assessed at an annual additional cost of $15,000 dollars or about six workmonths in the draft EIS. However, management cost analysis has not been reevaluated in the final EIS. The BLM felt that additional management costs would be extremely spectulative until a detailed management plan is prepared. Any additional costs resulting from wilderness designation would cover administrative, operational and visitor monitoring/ protection needs above those already necessary for livestock, wildlife, cultural, recreation and other resource management regardless of the outcome of wilderness designation. Much of the additional cost would stem from the need to use the "minimum tool" concept: use hand tools with access by foot or on horseback rather than allow the continued use of motorized equipment or vehicles for management work.

Response 196.02: The BLM is mandated by law and policy to identify a proposed course of action. To address the concern over value judgements, the final EIS attempts to clearly define what the impacts are rather than define them merely as positive or negative.

Response 199.01: Should one or both of the potential dam sites identified in the Idaho WSAs be developed, up to 50,000 acres of canyonlands could be flooded in Idaho and Nevada. However, since the release of the draft EIS the Army Corp of Engineers has determined that dams in the Owyhee Canyonlands WSAs are not feasible (see response 156.05). Mining activity is not expected to increase prior to legislative action. Should it occur, the Secretary of the Interior could revise the Proposed Action before it is sent to the President and Congress. The final EIS identifies specific mineral exploration activities in areas identified as having moderate mineral potential to allow more detailed analysis of potential impacts.

Response 199.02: The Owyhee Canyonlands WSAs contain a relatively small amount of the total livestock grazing and mineral/energy opportunities in the affected local counties; therefore, the amount of commodity development foregone by wilderness designation is insignificant.

Response 199.03: Livestock grazing is defined by the Wilderness Act of 1964 as a nonconforming allowable use. The BLM has no legal authority to recommend the elimination of grazing within proposed wilderness areas.

Response 199.04: This section of the document concerning issues not selected for analysis has been revised in the final EIS.

Response 199.05: Steel post/wire fences tend to blend into the plateau or canyon landscape within several hundred feet or yards. There are not enough miles of existing or proposed fencelines within the wilderness proposals to significantly affect wilderness experiences.

Response 199.06: Additional analysis of mineral impacts is presented in the final EIS.

Response 199.07: The BEA figures presented for personal income and employment include only those major areas of concern which are within the scope of the EIS.

Response 199.08: The wildlife section has been revised to include more detailed and accurate impact projections. Refer to Chapter IV for analyses by alternative.

Response 199.09: A short description of the USFS IMPLAN model has been added to the analysis of economic impacts in the final EIS.

Response 199.10: The local economy is defined as Owyhee County, Idaho; Malheur County, Oregon; and Elko County, Nevada as shown under Economics, Chapter III.

Response 199.11: The smallest economy that IMPLAN can simulate and analyze is a one county unit. In this analysis, BLM was working with a three-county economy and presented the effects for the three counties as a whole. Individual towns within the three county area would be affected by the alternatives, but a presentation of the degree of such effects was not possible to estimate.

Response 202.01: The narrative on economics has been changed to reflect the actual use of grazing privileges by permittees both within the affected allotments and the WSAs. Projections of changes in both grazing and recreation use can be found in the analysis of the various alternatives. In analyzing the amount of local personal income generated and increases in employment in the local economy as a result of changes in recreation use, we had to include in the analysis only those expenditures that took place in the local economy. The expenditures for camping gear, canoes, rafts, rifles, etc. were not included since they are not a cost of any one trip and no known method is available for pro ratios of these types of expenses. Costs that are trip specific, such as food, lodging, special permits, were included in the expenditure per user day calculations.

Response 205.01: All indications are that the demand for federal grazing privileges is high and will continue to remain high in the foreseeable future.

Response 205.02: All range improvements are analyzed using a benefit/cost procedure prior to their installation. This is done on an allotment-wide basis.

Response 205.03: The All Wilderness Alternative in the draft EIS was presented without road closures, land acquisition or wilderness boundary expansions to provide a full range of alternatives to analyze and was not intended to bias the impact analysis. It is apparent from numerous public comments that this action caused a lot of concern and misunderstanding. Consequently, management objectives in the All Wilderness Alternative of the

final Owyhee Canyonlands EIS are consistent with the Proposed Action and other wilderness alternatives which call for roadway closures, land acquisitions and wilderness boundary expansions.

Response 209.01: All wildlife species dependent upon both canyon and plateau habitat for their survival are given protection under the Wildlife (Bighorn Sheep) Wilderness Alternative. At distances greater than one mile from the canyon rimrocks, the principal species are antelope, sage grouse and other birds. These species are not dependent upon canyon habitat or a highly primitive environment for their survival. The plateau habitat which they require is plentiful throughout the three-state area. The Wildlife (Bighorn Sheep) Wilderness Alternative was developed to give habitat protection to only those species where the canyon/plateau ecosystem was critical to their survival.

Response 222.01: The entire upper Owyhee River corridor above Three Forks, Oregon has been well collected by Dr. Roger Rosentreter in conjunction with the Owyhee Canyonlands wilderness study. The Three Forks area has been extensively studied by Milton Lee Dean (1960, unpublished Masters thesis, Oregon State University). Much of the Oregon area has been inventoried by Dr. Pat Packard, College of Idaho.

Several of the species mentioned in the public comment might occur in the WSAs yet no specimens have been found in Packard's inventory. The WSA lands are generally higher in elevation than the known sites of these species. The species cited are all Category II; more information is needed. These species are not well known in the remote Owyhee's nor in the rest of the accessible parts of Oregon. A list of known threatened or sensitive plant species found in the WSAs is given in Chapter III of the final EIS.

Artemisia packardiae and Hackelia ophiobia are two recently described new species for the Owyhee River system. They have both been well collected and their range mapped on all upper forks of the Owyhee River. The other three recently described new species mentioned occur on unique ash soil types which are absent from the Owyhee Canyonlands WSAs.

Response 225.01: The BLM believes that proposing a wilderness area substantially larger than the WSAs is not reasonable under the BLM Wilderness Study Policy. Previous inventories have found that surrounding non-WSA lands lack the required wilderness characteristics for consideration under the Wilderness Act (FLMPA) of 1964 and Section 603 of the Federal Land Policy and Management Act of 1976. "Small" expansion of wilderness proposals into non-WSA lands is permissible under Section 202 of FLPMA if certain conditions are met. Refer to comment response 306.01.

Response 225.02: Proposals to eliminate grazing use and all associated management facilities are not permissible under the Wilderness Act (1964) and BLM Wilderness Management Policy. The wolf is not indigenous to the Owyhee Upland's desert area.

Response 242.01: The final EIS provides additional analysis of impacts to semi-primitive recreation use from wilderness designation. Use of the existing vehicle routes, except the routes into the canyons, are not currently used by "hundreds" of people.

Response 242.02: The assessment of impacts to semi-primitive recreation in the final EIS has been expanded to include hunters, rock hounds, sightseers, vehicle campers and ORV users.

Response 242.03: The location of cherrystem roads and ways within the WSAs have been added to maps prepared for the final EIS.

Response 258.01: The issue of powerline corridors in this wilderness EIS is limited to corridors identified by previous planning decisions. A utility corridor along the El Paso Gas Pipeline right-of-way was addressed in both the Owyhee and Bruneau MFPs and the Elko RMP. In Idaho, a several-mile wide corridor along the pipeline was not identified because of potential impacts to scenic, wildlife, wilderness and wild river values. Only a one-quarter and one-mile wide underground corridor was identified in Idaho to permit additional buried pipelines. A three-mile wide corridor along the El Paso pipeline and a five-mile wide planning corridor for above ground use has been identified in Nevada. A statewide Idaho utility corridor study is being considered to address the issue of corridor route alternatives across Idaho (including southwest Idaho into established corridors in Oregon and Nevada). See Chapter I, SCOPING AND ENVIRONMENTAL ISSUE IDENTIFICATION.

Response 262.01: The concept of "manageability adjustments" in the draft EIS caused considerable concern and misunderstanding for many of those supporting wilderness designation. The concept of manageability adjustments in the draft EIS included reductions in wilderness acreages because of relatively low wilderness values plus concerns for the ability to manage areas as wilderness due to ORV access, external influences, private inholdings, and topographically protectable or definable boundaries. After a reevaluation of adjustment rationales, the BLM agrees with the public that all areas of the WSAs are manageable. WSA lands with relatively low wilderness values were eliminated in the Proposed Action of the final EIS only for resource conflict concerns or to make improvements in management configurations.

Response 282.01: All livestock grazing practices proposed or currently underway in the WSAs under the Proposed Action and other alternatives result in the stabilization or reduction of soil erosion trends. This reduction can be brought about through improved ecological conditions of vegetation communities (increased plant abundance and vigor) in areas where livestock use would remain the same as well as in areas where use would increase. Increasing livestock use does not significantly change soil erosion trends if vegetative condition is managed for improving condition.

Response 282.02: By federal law, policy and regulation, livestock permittees are allowed to retain their grazing privileges within wilderness areas as well as have small increases if the increases do not affect wilderness values. They are entitled to the active preference identified at

the time of designation. Many grazing permittees are now operating at less than their active preference. As the condition of plant communities improves and forage availability increases, most permittees will be fortunate if they ever regain their preference, yet alone small increases in use within the wilderness areas proposed. In Oregon, there is excess forage available for use which could be allocated to livestock without significantly affecting wilderness characteristics or supplemental values (special features). Much of the projected increase in AUMs for affected allotments shown under the various alternatives will occur on lands outside the WSAs or the wilderness proposals.

Response 282.03: The total acreage of Sagebrush Steppe ecosystem is not documented in the final EIS, yet the extent of the ecosystem in geographic terms is described in Chapter III. Also, how much of the total ecosystem is converted to non-native grass seedings and other agricultural purposes is not a fact necessary for making a wilderness determination for the Owyhee Canyonlands.

Response 282.04: The cost of range improvements in the WSAs is not contained in the discussion of impacts in the final EIS. Benefit/cost analysis will be performed on any improvements in each allotment prior to installation. The current grazing fee structure is being evaluated by the Departments of Agriculture and Interior. The fee structure is established by Congress.

Response 282.05: The Owyhee Wilderness Plan Amendment/Final EIS was released in 1986. It provides the required environmental assessment of wilderness proposals for the WSAs associated with the North Fork Owyhee River and Juniper Mountain. These WSAs were analyzed separately from those of the Owyhee Canyonlands WSAs because of distinct differences in environmental conditions and resource issues and because of multiple-use planning schedules.

The Oregon WSAs are all in the statewide Oregon Wilderness EIS (draft 1985). Oregon WSAs OR-3-59, OR-3-110 and OR-3-173 have been noted in the Owyhee Canyonlands Wilderness EIS because they have river canyons or tributary canyon systems which directly connect with the free-flowing portions of the Owyhee River system contained in the Owyhee Canyonlands WSAs. Only these WSAs are intricately tied to the assessment of issues concerning the management of the Owyhee River system as a congressional designated wilderness or wild river. The three Oregon WSAs were not assessed in the Owyhee Canyonlands Wilderness EIS because the BLM Oregon State Office chose to give a statewide perspective on wilderness. Oregon WSA OR-3-195 was placed in the Owyhee Canyonlands Wilderness EIS because it was contiguous to Idaho WSA ID-16-48B. The Oregon Wilderness EIS also references the Owyhee Canyonlands Wilderness EIS.

Response 283.01: The forage allocation for wildlife in the WSAs runs about 3% to 5% of total available forage. This is sufficient to meet existing and anticipated wildlife needs under the Proposed Action and other alternatives (see Chapter II).

Response 283.02: The wildlife species described are the primary species impacted by land management actions initiated by BLM or are the only species which currently receive monitoring.

Response 283.03: This section of the document has been revised to include only those species that have been selected for analysis. In response to your questions, our information shows that torrent sculpin (Cottus rhotheus), longnose dace (Rhinichthys cataractae), and speckled dace (Rhinichthys osculus) are present in the Owyhee River system.

Response 283.04: The entire existing wild river designation in Oregon or additional proposals for the Owyhee River and South Fork Owyhee River in Idaho and Nevada is contained in the Owyhee Canyonlands WSAs and adjoining Oregon WSAs OR-3-59 and OR-3-110 (see response to comment 282.05). The issue of wild river designation is discussed under the No Action (No Wilderness) Alternative and No Action (No Wilderness) Subalternative of the final Owyhee Canyonlands Wilderness EIS.

Response 283.05: See response to comments 282.05 and 283.03. Also see response to comments 225.01 and 262.01.

Response 287.01: See response to comment 283.02.

Response 291.01: See response to comment 205.03.

Response 291.02: See response to comment 262.01.

Response 291.03: The sections in Chapter IV, (Environmental Consequences) that analyze impacts to wildlife have been revised to include more detailed analyses and descriptions of impacts, by alternative, on selected wildlife species.

Response 291.04: See response to comment 262.01.

Response 291.05: See response to comment 262.01. All the wilderness proposals in the final EIS call for the consideration of federal-state land exchanges.

Response 296.01: Site specific impact analysis has been substantially increased in the final EIS, particularly for vegetation and utility corridors. Allotment mapping has been added to the final EIS.

Response 296.02: Chapter III of the final EIS contains a discussion of plant succession on big sagebrush and low sagebrush ecological sites as it relates to natural fire regimes. A short assessment of the value or need for wilderness in the Sagebrush Steppe ecosystem has also been included in Chapter I.

Response 296.03: See response to oral comment 65.10. Though eliminated areas have about the same degree of naturalness as those retained in the wilderness proposal for WSA OR-3-195, the retained plateau areas are judged to have greater wildlife values (bighorn sheep) because of the canyon/plateau ecosystem interrelationship which exists.

Response 302.01: No benefit/cost analysis was prepared for the alternatives in this EIS. It is felt that there are significant non-quantifiable values found in the wilderness issue which would make any such analysis inaccurate. Thus, pursuant to 40 CFR 1502.23, no benefit/cost (efficiency) analysis was prepared.

Response 302.02: The description and assessment of mineral and energy resource potential has been updated in the final EIS. No acreage in the Proposed Action or other alternatives of the draft or final EIS was eliminated because of unsubstantiated speculation over mineral potential. Reductions in the wilderness proposal due to mineral concerns have occurred only in Oregon WSA OR-3-195 where data indicates favorable mineral potential, but even here this concern was only secondary to other resource considerations.

Response 302.03: See response to comment 225.01.

Response 302.04: See response to comment 205.03.

Response 302.05: Refer to the wildlife and vegetation sections which have been revised.

Response 303.01: See response to comment 156.04.

Response 305.01: See response to comment 156.04.

Response 306.01: The BLM believes that proposing a wilderness area significantly larger than the WSAs is not reasonable under the BLM Wilderness Study Policy. The policy only permits "relatively small" increases under the authorization of Section 202 of the Federal Land Policy and Management (FLPMA). The CIHD proposal for 1.2 million acres has not been added to the alternatives presented in the final EIS. The inventory process under Section 603 of the Federal Land Policy and Management Act (FLPMA) has already provided for public comment on the issue of identifying wilderness characteristics for all BLM lands in the state of Oregon, Idaho and Nevada, and a decision has been rendered by each BLM State Director. Such being the case, the issue as to whether large tracts of BLM contained in the separate roadless units do or do not contain wilderness characteristics will not be reassessed and alternatives based upon this issue will not be given an environmental analysis in this EIS. However, roadless units can be given consideration for wilderness designation under Section 202 of FLPMA if the inclusion of non-WSA lands in a wilderness proposal is necessary to enhance the manageability of the wilderness area (provide increased protection of existing wilderness values within the WSAs). The BLM believes that the consideration of non-WSA lands should be confined to the original roadless units from which the WSAs were established. Furthermore, these lands should be considered only if judged to be necessary for the protection of wilderness characteristics within WSAs. The BLM has included up to 4,205 acres of non-WSA lands adjacent to the Owyhee Canyonlands WSAs in several of the wilderness alternatives presented in the final EIS. These acres lie within the original roadless inventory units for the Owyhee Canyonlands WSAs. Their inclusion is provided only to improve the manageability of the wilderness proposals.

The BLM has concluded that the remaining 32,148 acres of non-WSA public lands proposed in CIHD's "Conservationist's Modified All Wilderness Alternative," which lie in the Owyhee Canyonlands inventory units, are not necessary for the protection of wilderness characteristics within the WSAs and that they continue to lack wilderness characteristics. The additional 423,700 acres of the CIHD 1.2 Million Acre Alternative which lie in other roadless inventory units or in the north-central portion of Owyhee Canyonlands unit ID-16-49A will also not be analyzed in this EIS under Section 202 of FLPMA because they too do not meet the conditions required. Land exchanges/acqusitions within or adjacent to the affected non-WSA roadless units and enhancement work (road/way closures within the roadless units) in the three-state area would not alter BLM's assessment of the units wilderness characteristics based upon existing wilderness inventory standards.

A table depicting the Conservationists Modified All Wilderness Alternative for each of the Owyhee Canyonlands WSAs has been added to chapter I, FORMULATION OF ALTERNATIVES. A map of the CIHD 1.2 Million Acre Alternative has been placed at the end of Comment 306.

Response 306.02: The Proposed Action and other wilderness alternatives contained in the final EIS each call for the consideration of federal-state land exchanges. Specific proposals for exchanges or acquisitions have been made, but negotiations will not be initiated until the issue of wilderness designation on public lands is resolved by Congress. Some lands are included in larger exchange programs such as the South Mountain Exchange in the Owyhee Resource Area of the Boise District and are independent of wilderness designation. The 30,000 acres of Oregon State lands were not included in the Proposed Action since they lack wilderness characteristics.

Response 306.03: The name Wildlife Wilderness Alternative has been retained. See Chapter IV for a detailed analysis of impacts to wildlife for this alternative.

Response 306.04: See response to comment 205.03. The concerns about the enhancement opportunities for the All Wilderness Alternative have been addressed in the final EIS.

Response 306.05: The boundaries of the Oregon WSA OR-3-195 and subsequent wilderness boundary proposals were modified in accordance with the Sierra Club vs Watt decision rendered by the Court in 1985. The BLM has incorporated the split-estate lands into its wilderness proposal since the lands have returned to wilderness study status. The various alternatives presented in the final EIS recommend these split-estate lands for wilderness designation through a federal-state exchange.

Response 306.06: See response to comment 262.01. The concept of "manageability adjustments" has been dropped from the final EIS. Boundary adjustments are now based upon resource conflict considerations and improving management configuration.

Response 306.07: The BLM feels that the placement of an additional road and launch facilities into a wilderness area is inappropriate for wilderness management. Should additional vehicle access and recreation facilities be required for recreation use management, the affected area should not be recommended for wilderness. The need for additional road access and recreation facilities at Twelve Mile in WSA NV-010-106 is addressed under the assessment of wilderness characteristics in Chapter IV of the final EIS.

Response 306.08: The sections in Chapter IV analyzing impacts to wildlife have been revised to include more detailed analyses, by alternative, of impacts to selected wildlife species. Also see Table II-17, Comparative Impact Summary.

Response 306.09: The inventory decision on the quality of wilderness characteristics in WSA ID-16-48C must stand during the wilderness studies. No new information has been presented which would justify a change in the inventory decision.

Response 306.10: See response to comment 222.01. No sensitive, threatened, or endangered plant species other than those listed in the draft and final EIS has been inventoried in the WSAs.

Response 306.11: The sites for potential dams on the Owyhee River in Idaho have been specifically identified in Chapter I of the final EIS. The BLM has no knowledge of low-head hydro sites on tributary canyons within the Owyhee Canyonlands WSAs. No hydroelectric facilities have been identified as feasible for construction (see response to 156.05).

Response 306.12: The Idaho Wildlife Valuation Study being done cooperatively by the Idaho Fish and Game, U.S. Forest Service, and BLM was not yet complete at the time this document was prepared. As such, any preliminary results cannot be used in this EIS. The expenditures per user day value came from a variety of sources including Tiekney 1980, Michalson and Hamilton 1973, U.S. Department of the Interior 1980, and Walsh, Ericson, Aristguy and Hansen 1980 (see References for complete citation). These values were then input into IMPLAN (see appendix for a short description) which calculated income and employment per user day.

Response 306.13: Impacts from mineral exploration have been updated and given greater consideration in the final EIS. Site specific projections of mineral actions have been made based upon geochemical analysis of sediment samples.

Response 306.14: See response to comments 205.03 and 306.04.

Response 306.15: The final EIS reassesses the impacts of wilderness designation upon solitude and upon primitive and semi-primitive recreation. Under the new assessment, increases in primitive and semi-primitive motorized recreation use are not expected to be large enough to cause significant negative impacts to other resource uses; however, projected increases in primitive and semi-primitiverecreation use could have minor localized adverse impacts on some wildlife populations.

Response 306.16: The Forest Service wilderness study recommendations are not documented in the final EIS. All BLM wilderness studies for the Sagebrush Steppe ecosystem were not completed when this final EIS was prepared; a complete listing of suitable recommendations will not be available until the wilderness study reports have been completed for each state.

Response 308.01: See response to comment 306.02.

Response 308.02: See response to comment 306.07.

Response 330.01: Wilderness designation of the Owyhee Canyonlands WSAs under any alternative would have no impact upon downstream or upstream water rights. The existing wild river designation in Oregon could affect upstream use if such use would adversely affect minimum stream flows in the river.

Response 330.02: The answer to these questions can be found under the assessment of wilderness characteristics and recreation impacts in Chapter IV of the final EIS.

Response 337.01: The Idaho Wildlife Valuation Study was not completed at the time this document was prepared. As such, any preliminary results cannot be used in this EIS. The results of that study would not apply to the Oregon and Nevada portions of this EIS.

Response 338.01: See response to comments 225.01, 306.01 and 357.02.

Response 347.01 and 347.02: See response to comments 225.01 or 306.01.

Response 351.01: The draft and final EIS evaluates the impact to livestock grazing operations within the WSAs as well as in all the non-WSA acreage of affected allotments. This evaluation is done because limitations on livestock use under wilderness designation can affect the potential for increases on nonwilderness lands (see impacts to livestock grazing in Chapter IV of the final EIS). The large increases referred to in the public comment are for the entire acreage of affected allotments and primarily reflect increases on nonwilderness lands. Increases beyond active preference (see response to comment 282.02) in livestock use within the wilderness area proposed under each alternative are relatively small or nonexistent.

Response 351.02: See response to comment 205.03.

Response 352.01 and 352.02: See response to comment 258.01.

Response 356.01: Refer to the wildlife sections in Chapter III and IV which have been revised to include more detail. Chukar and raptors were not species selected for detailed analysis. Our information indicates that sage grouse are increasing in the WSA area.

Response 356.02: The final EIS contains two nonwilderness alternatives. The Canyonlands Wilderness Alternative also recommends most of the plateau lands as nonsuitable for wilderness.

Response 357.01: See response to comment 222.01. Dr. Roger Rosentreter has extensively surveyed the riparian and canyon habitat of the Owyhee River system in Oregon, Idaho and Nevada for many years as a member of the BLM staff. He specializes in sensitive, threatened and endangered plant species. The amount of information given in the draft and final EIS reflects the degree of impact the Proposed Action and other alternatives are projected to have on sensitive, threatened and endangered species. Dr. Rosentreter's work has shown that the habitat locations for the species listed are such that management actions would generally have no significant impact.

Response 357.02: See response to comments 225.01, 225.02, 282.02 and 306.01. Also see Chapter I, Alternatives Considered But Not Selected for Analysis. The Earth First proposal of 3.5 million acres is not addressed in this EIS because it goes well beyond the scope of the Owyhee Canyonlands Wilderness EIS and BLM Wilderness Study Policy, and the intent of the Wilderness Act (1964) and Federal Land Policy and Management Act (1976).

Response 358.01: The concern over issues addressed by the public comment has been dealt with in Chapter I of the final EIS by expanding the issue statements and subsequently the impact assessment in Chapter IV.

Response 358.02: See response to comment 357.02.

Response 358.03: Though the public comment addresses the concern that the Canyonlands Wilderness Alternative does not provide "recognizable advantages over any of the other alternatives," this alternative addresses the concerns of local communities that the only wilderness characteristics worth preserving (if any) lie within the canyons of the WSAs.

Response 358.04: See response to comment 262.01. Impacts to wilderness characteristics have been completely rewritten in the final EIS. Deleting WSA plateau lands does not create buffer zones (see response to comment 156.02).

Response 358.05: These issues have already been stated under a different formats in the draft and final EIS, or were incorporated into changes in the final EIS as previously discussed under the response to comment 358.01.

Response 358.06: The issue of costs associated with BLM grazing management and wilderness management actions has been excluded from the final EIS.

Response 358.07: From a livestock management perspective, the bottomline concern is the amount of available forage that a particular piece of land can provide under different degrees of ecological condition. The pasture is the basic operational unit for the management of livestock grazing systems. The environmental analysis of livestock grazing is keyed specifically to livestock operations and not to subjective value judgements concerning other resource values. These judgements are dealt with in other resource impact analysis throughout Chapter IV of the EIS.

Response 358.08: The influence of livestock grazing on ecological condition in the Sagebrush Steppe ecosystem is discussed under vegetation impacts in Chapter IV of the final EIS.

Response 358.09: See response to comment 282.02.

Response 358.10: Increases in livestock use does not necessarily result in the impacts mentioned because livestock increases are accompanied by improved grazing management systems which provide better distribution of livestock, reduced use or elimination of grazing in riparian areas, and periods of non-use throughout the wilderness area. See Chapter IV of the final EIS for an evaluation of these impacts.

Response 358.11: The management actions identified in the Proposed Action and other alternatives specifically address the concerns mentioned in the public comment. An assessment of these concerns are presented in Chapter IV of the final EIS.

Response 364.01: See response to comments 225.01 and 306.01.

Response 364.02: The final EIS provides an adequate range of alternatives and sufficient site specific analysis by WSA to meet NEPA requirements, particularly in light of the fact that all the WSAs adjoin each other in one area and the impacts to one are similar if not identical to those which could occur in another.

Response 364.03: Rangeland improvement projects, particularly land treatments, have been fully documented in the final EIS.

Response 364.04: Presenting, allotment specific information limited to lands only within the boundaries of the WSAs is not essential to the impact analysis. The AUM totals for all allotments within each WSA is all that is necessary to provide an environmental assessment for impacts to wilderness, special features and recreation within the WSAs' boundaries. Impacts to livestock grazing are given on a total allotment-specific basis for all lands within affected allotments because the impact of wilderness designation extends into nonwilderness/non-WSA lands of the allotments.

Response 364.05: The draft EIS was unquestionably a worst case analysis. Site specific data was limited, so it was assumed that all resource on all acreages could be maximally impacted. More site specific information was formulated for the final EIS. Consequently, the worst case analysis has been toned down.

Response 364.06: See response to comment 262.01.

Response 364.07: BLM cannot assume that private property will be acquired since acquisition is at the discretion of private property owners.

Response 365.01: BLM land use actions or recommendations have no jurisdiction over the continued use of airspace by the Department of Defense in a Military Operations Area (MOA). A significant alteration in flight paths for military aircraft in the MOA could occur only through a congressional mandate associated with a wilderness designation.

Response 365.02: The Proposed Action and other alternatives provide for a carrying capacity for both recreation users and livestock use which ensures a perpetuation of the area's existing resource values. These carrying capacities are based upon the environmental needs of a desert ecosystem.

Response 367.01: See response to comments 225.01 and 306.01.

Response 368.01: The economic analysis includes all communities in the tri-county area including all those local population areas dependent upon the lands under study. Most of the population lies "some distance" from the WSAs. Affected livestock operators do not live adjacent to the WSAs; they live in the population centers of the tri-county area or in other more distant counties. Most grazing operators could see increases over current use in their allotments regardless of wilderness designation.

Response 368.02: Regardless of wilderness designation, the BLM must maintain an ongoing program with existing personnel and facilities to manage livestock grazing, recreation, wildlife, minerals and cultural resources, etc. Wilderness designation would add costs for a monitoring/enforcement program and a signing program. Many costs such as administrative costs associated with management and recreation planning personnel positions are already in place. Costs for monitoring multiple resources in wilderness areas should be higher than in nonwilderness areas because of the need to utilize the "minimum tool" concept: the use of hand tools with access on foot or horseback rather than the use of motorized equipment and vehicles for management work. Elaborate road barriers, etc. would be employed only if vehicle trespassing becomes a serious problem following the signing of wilderness boundaries. One of the principal costs associated with managing existing Forest Service wilderness areas is regulating carrying capacities for visitor use and maintaining recreation facilities (trails, campsites, etc.). Most use in the Owyhee Canyonlands Wilderness is expected to be whitewater river running and, to a lesser extent, backpacking/horsepacking and hunting. The carrying capacity and recreation facilities for wild river management under the Wild River Alternative/Subalternative would be identical under wilderness management, so wilderness designation would not increase the basic management cost. It should be noted, however, basic river management costs are expected to rise as increased river use occurs regardless of wilderness designation.

Response 369.01: See response to comment 156.04. Most of WSA ID-16-48C has been eliminated from the Proposed Action in the final EIS. Much of the lands remaining in the wilderness proposal for WSAs ID-16-48C, ID-16-52 and NV-010-103A are contained in the Owyhee River Management Area designation. This designation already has existing lease stipulations prohibiting surface occupancy for oil/gas operations. Considering the probable depth of any

hydrocarbon reserves (over 15,000 feet), however, slant drilling technology should reduce the adverse impact to energy exploration opportunities in the Owyhee River Management Area.

Response 373.01: See response to comment 282.05; also comments 225.01, 306.01 and 357.02.

Response 373.02: WSA boundaries must be along existing roads or non-federal property lines irregardless of how close they are to the canyons.

Response 373.03: The draft and final EIS both discuss the impact to wildlife species as a result of nondesignation. See response to comments 291.03 and 306.08.

Response 373.04: See response to comment 282.02.

Response 373.05: Wilderness study area (WSA) boundaries are established along existing roads and/or non-federal property lines regardless of their proximity to the canyon rims. WSAs were identified based upon the presence of wilderness characteristics (naturalness; size; opportunities for primitive recreation or solitude). WSA boundaries could not be established based upon wildlife habitat boundaries. In most Canyonlands WSAs, the identified lands contain much of the crucial habitat needs for wildlife species dependent upon a canyon/plateau interrelationship (bighorn sheep and raptors). The wilderness study process permits the consideration of wildlife habitat concerns when developing alternative wilderness designation boundaries within the WSAs [ie., Wildlife (Bighorn Sheep) Wilderness Alternative]. Because of the Owyhee River Management Area designation along the river canyons, little or no development within about one mile of the rim of the canyons is expected to occur without wilderness designation. Development away from the rims without wilderness would be limited to vegetation treatments and possibly oil/gas exploration activity. The vegetation treatments are being designed to be of benefit to wildlife as well as livestock.

Response 375.01: Refer to the wildlife and vegetation sections which have been revised.

Response 378.01: See response to comment 258.01.

Response 384.01: Greater detail has been given in regards to management actions under the Proposed Action and other alternatives in the final EIS.

ORAL COMMENTS AND RESPONSES

1. Grant Baugh, Jordan Valley Public Hearing

Comment 1.01: "I would like to point out the table on page 4-17 in the EIS booklet here. It pertains to current and 20-year projected livestock uses within the wilderness study area boundary. I think that this particular table should be stricken from this document because I think it is misleading. I think that looking at this, and by what little description has been put in the EIS with it, it would tend to lead the uneducated or uniformed people who may be making the decision on this in Washington to believe that once we go from current use to all manageable wilderness use we may double the grazing capacity.

In some cases, you may be able to double the amount of forage within some of those areas but most of them didn't have enough water to use it if you do that. The no wilderness and canyonlands, theres two-and-a-half times as much livestock forage. I feel that would be perceived as a mitigating measure with respect to the livestock grazing and that's not the case. Many of those areas are grazed to their full potential at the present time, given the water and livestock conditions and may not have much capacity for increases."

Response 1.01: The table (Table IV-4) in the draft EIS referred to is based upon the authority to allocate available forage to livestock operators as it becomes available under the various alternatives. Increases in forage availability for livestock use in Idaho and Oregon are expected to occur in both wilderness and nonwilderness areas as range conditions improve and/or as livestock seeding projects are implemented. Increased forage availability would also come from allocating existing unused forage in Oregon.

The figures for the No Action (No Wilderness) Alternative/Subalternative and Canyonlands Alternative in the final EIS represent the maximum potential use that livestock permittees could receive from future available forage. The figures under the Proposed Action and other wilderness alternatives are the amount of use permittees could have within a wilderness designation regardless of whether other forage is available. The affected areas are already well watered; therefore, the increased forage could be utilized if so desired by the livestock industry.

2. Mike Hanley (Owyhee Cattlemen's Association), Jordan Valley Public Hearing

Comment 2.01: "...we reject the Owyhee Canyonlands Wilderness EIS draft and propose a more manageable alternative which protects the real wild and scenic values for all public benefit. The absence of a WSR alternative seems inconsistent considering the broad-based support for such a designation. This support spans all segments of government, river users, adjacent landowners and conservation groups. We are concerned that there is not a Scenic and Wild River Alternative in the EIS and submit a sixth alternative.

Therefore, the Owyhee Cattlemen's Association proposes a wild and scenic river classification for the main stem of the Owyhee River from the northwest boundary of the Duck Valley Indian Reservation to the backwaters of Lake

Owyhee as proposed by the Vale District Bureau of Land Management, which has jurisdiction over the eastern two-thirds of the Owyhee. Alternative No. 6 would extend rim to rim and up tributaries one-fourth of a mile with the exception of the farm and ranch land at Rome, Oregon, which would be excluded from designation. [see Exhibit A, which is a map of the proposed alternative.]*

Lands beyond our Wild and Scenic River alternative would continue to be managed under current multiple use."

*SEE THE OWYHEE CATTLEMEN'S ASSOCIATION'S WRITTEN SUBMISSION 0-2

Response 2.01: The No Action (No Wilderness) Alternative/Subalternative in the draft EIS called for the continued management of the Owyhee River in Oregon, Idaho and Nevada under the Owyhee River Recreation Area Management Plan. The Owyhee Cattlemen's Association, as a principal participant in the preparation and review of this document, must be aware that the river plan supports a congressional wild river designation for the Owyhee River within the WSAs. The Association should also be aware that the plan calls for designating the South Fork Owyhee River as a wild river. Since the writing of the draft EIS, the Owyhee River in Oregon WSA OR-3-195 has been designated a wild river by Congress. To alleviate the apparent confusion over recommendations concerning wild rivers, a specific No Action (No Wilderness) Alternative, as well as a No Action (No Wilderness) Subalternative, has been presented in the final EIS calling for expanding the congressional wild river designation on the Owyhee River system into Idaho. To allow Congress a clear choice between wilderness or wild river, no wild river recommendations are presented in the Proposed Action or other wilderness alternatives of the final EIS.

5. Robert Skinner, Jordan Valley Public Hearing

Comment 5.01: "We have strongly supported multiple use, and I would certainly recommend that tonight. I would like to point out one thing from Chapter 2, Page 19 in regard to the economics. I think that for the All Wilderness designation there you have a total income of 3.3 million. For 200 designations, including the canyon lands wilderness you have 3.6 million. I think that is significant in this area. You are only involving something in the neighborhood of 100 jobs in the area.

When you add that much income I think that is very significant figure. You are also adding only eight jobs, and I think that is going to take far more than that to police this area once it is designated for any use."

Response 5.01: The income generated from activities within the WSAs (grazing and recreation) under the various alternatives range from $3.1 to $3.4 million (see the assessment on economics in Chapter IV of the final EIS). This would be only 0.3 to 0.4 percent of the 1981 three-county income. This would have to be considered insignificant.

The employment projections shown do not account for jobs generated due to BLM administering wilderness. These would only be some limited seasonal employment related to this activity.

6. Jim Anderson, Jordan Valley Public Hearing

Comment 6.01: "I have got some kind of general comments. I don't have anything terribly specific. They are all in your book. I think it amounts to a bunch of mumbo-jumbo but in the preferred alternative there has been outlined -- how they would administer this large area. How the rules of wilderness enforcement -- how they will enforce the rules of this wilderness area, you know, no vehicular traffic. If they are trying to do this on anything but the main stem of the Owyhee from rim to rim it would be ludicrous.

There are no natural barriers or no limited access on the plateaus. Vehicle travel is possible almost anywhere on the plateaus and creative buffer zones which was mentioned in this. This strikes me as an unlimited alternative.

Where will the lines be drawn? Who will decide how it is going to be administered, these buffer zones? Is it then going to be a defacto wilderness, and then will there have to be a buffer zone for the buffer? Where are we going to stop this, in Portland? The coast? The Mississippi banks? The Potomac? I don't know."

Response 6.01: Due to the remoteness of the Owyhee Canyonlands WSAs and the fact that there is little reason why people would get involved with off-road travel on the plateau, the wilderness area could be protected from vehicle trespass as well as many of the already designated U.S. Forest Service wilderness areas. The posting or gating of major access routes has been successful in protecting wilderness boundaries. The BLM will not establish management "buffer zones" around any Owyhee Canyonlands Wilderness. There are tens of thousands of acres of remote public lands around the area which already reduce the influences of human activity.

Comment 6.02: "The sheep are going to be in this area regardless. They are going to be there. That is what I get from this. However, it would be nice to find out that that -- why they aren't there now. What happened to them? They would have to bring them in. Did they have a winter kill or hunter pressure? Was it disease?

As a property owner on the river I have never been contacted as to what my opinion was to the bighorn sheep. They never asked me if I would support or introduce animals. If they have, they haven't mentioned anything about it. Are they going to put a fence around them to keep them off? They haven't said anything about that."

Response 6.02: The original bighorn sheep populations which thrived in the Owyhee Canyonlands, as well as throughout the Intermountain West, disappeared around the turn of the century due to a combination of diseases introduced by domestic sheep and from hunting pressure. Bighorn sheep were re-introduced into the canyons of Idaho by the Idaho Department of Fish and Game in the mid-60's with the knowledge and approval of private landowners. Expansion of the Idaho population or the transplanting of additional sheep by the Oregon Department of Fish and Wildlife could cause bighorn sheep to

inhabit Mr. Anderson's property around Louse Canyon and Three Forks, Oregon (WSA OR-3-195). The responsibility for wildlife populations lies with state wildlife agencies. The Oregon Department of Fish and Wildlife should contact Mr. Anderson before bighorn become established on his property as a result of state agency actions.

Comment 6.03: "What about the range rights? You are going to have people on the river. There is a lot of people on the river now. They project continued increasing use. Are these people going to push these sheep out on top? If so, is that going to interfere with the range rights? If it is going to interfere with these range rights, which comes first, cattle or sheep?

From reading that, it seems like sheep come first. Are the people who have to take the reduction because of these sheep, are they going to be compensated? Who is going to do it? I am not going to say anything about that."

Response 6.03: The carrying capacity established for the Owyhee River system reflects the needs of bighorn sheep. Bighorns are more sensitive to disturbance from above than they are from below. The number of parties floating the river would not force bighorn sheep onto the plateau. They would continue to use canyon habitat and adjacent plateau rimrock areas. Bighorn sheep and other wildlife species should continue to use no more than 3% to 5% of available forage. Wildlife forage allocations are currently set at about 3% to 5% of available forage. Much of the forage used by bighorns is within the canyons where, in many cases, no forage has been allocated to livestock.

Comment 6.04: "There are also some water developments along the rim. They are rather close to the rim. I am sure this will be used by the sheep.

I get the feeling that nothing can interfere with the sheep. Well, who gets to? Some of those water developments were built by cattlemen for the cattle. There is nothing wrong with sharing them but I would hate to have them taken away. I don't see where they were addressed maybe they were and I missed it."

Response 6.04: No water developments have been or will be removed from the plateau because of bighorn sheep. Bighorn sheep management constraints would not let new livestock reservoirs into bighorn habitat unless impacts to the population can be mitigated or eliminated.

7. Theodore T. Cowgill, Jordan Valley Public Hearing

Comment 7.01: "In Nevada, the Owyhee River is not adjudicated and is available for those people to appropriate and use. Now, as that development continues to occur, there is less water flowing into the Owyhee Reservoir. In some years there will probably develop shortages there. The only way we can overcome this is if the irrigators would have an additional storage. That then brings up the part that I think has not been addressed properly in this report."

Response 7.01: See response to written comment 156.05. The issue of water storage capabilities concerns not only wilderness designation but also wild river designation. A wild river designation on the Owyhee River in Oregon already prohibits additional reservoirs. The No Action (No Wilderness) Alternative/Subalternative of the final EIS calls for the expansion of the wild river designation into Idaho. Consequently, any additional water storage for the Owyhee River must occur upstream from the WSAs subject to minimum flow requirements for wild rivers.

Comment 7.02: "Now, a lot of people who enjoy that river there might think this could be very damaging to the whole environment and reduce recreational value but a reservoir on the upper areas of the river here could have some beneficial benefits to the area. Since the river does go down to very low levels. It is warm and does not support a good fishery at this time. If there were reservoirs up above and the waters were dumped out during the summer, out of the lower part of the reservoir, it would be cool, clear water and this could support a much better fishery in the Owyhee River."

Response 7.02: See response to written comment 156.05.

12. Philip Heinrich, Jordan Valley Public Hearing

Comment 12.01: "..., I support the All Wilderness Alternative but I would like to see it modified so that all roads and ways in the wilderness area be closed, except for those leading to riverboat put-in points. I can't understand why the roads need to stay open in the All Wilderness Alternative when they can be closed in the Proposed Action. That was something in the draft that I didn't understands. I figured that with a greater or more comprehensive proposal there would be more road closing than there would be in the small wilderness, including the All Manageable, but in fact, if I read it correctly more roads would be closed in the All Manageable Alternative than in the All Wilderness Alternative, and I didn't understand that contradiction."

Response 12.01: See response to written comment 205.03.

16. Alan Hausrath (Idaho Environmental Council), Boise Public Hearing

Comment 16.01: "The I.E.C. does have one question about the DEIS. On Page II-18, under the topic of Lands, it is indicated below the All Manageable Wilderness Alternative, that state lands could be exchanged and willing private landowners could negotiate easements or cooperative agreements. On the other hand, under the All Wilderness Alternative, it is stated that neither of these would take place. Why this difference? One might speculate that the B.L.M. was trying to weight the scales in favor of its preferred alternative instead of the All Wilderness Alternative."

Response 16.01: See response to written comment 205.03.

18. Janet Ward (American Association of University Women), Boise Public Hearing

Comment 18.01: "It is difficult to understand the rationale for management differences between the proposed All Manageable Wilderness an the All Wilderness Alternative. To quote from Page II-11: "Management would bethe same, except (in the All-Wilderness Alternative) measures to enhance manageability (road closures and land acquisition) would not occur, nor would the one-fourth mile utility corridor along the Northwest Gas Pipeline."

This is reflected in Table IV-2 and on Page IV-12, which notes that in the All Wilderness Alternative cherry stem roads would not be closed. This difference seems arbitrary as the basis for the decision is not included in the E.I.S. Yet this arbitrary difference weights the Comparative Impact Summary Table II-7 in favor of the proposed All Manageable Wilderness."

Response 18.01: See response to written comment 205.03. Also, the utility corridor could not exist under the All Wilderness Alternative because this alternative requires that all lands of the WSA be included in the wilderness proposal. The proposed corridor could not go into the legal boundary of the wilderness area.

25. Ted Weigold, Boise Public Hearing

Comment 25.01: "Most of you know that when national polls are done percentage of significance is for a range of significance usually covers a span of 3 to 5 percent. I would have to say that some of these numbers must be guessing. I would have to say that you would have better economic base data for the number of cattle that you can run on the ranges in the increases that you are proposing to have on the range but I really question where some of these recommendations and numbers are coming from and how they were arrived at. I am specifically fascinated by the All Manageable Wilderness having 307 percent increase in the recreational use and then the No Wilderness, No Action Alternative having a 307 percent increase.

It seems to suggest that there is absolutely no recreational use sensitivity to whether or not it is designated wilderness. If this experience of this area is the same as other areas that have been designated wilderness elsewhere in the United States I would suggest that those numbers that you arrived at may be suspect.

I would like to see in your final report more of an evaluation of these specific numbers. I think you need to go -- I think you need to present how it is you derive some of these factors. Again, I am amazed at how close the two commodity user sides are in each of the alternatives. You do state that the no-alternative is significantly more beneficial for the whole economy than any other alternative. I think that is important because it is suggested if it goes all wilderness you do not have a 5 percent differential in grazing potential from what it would be if there was none."

Response 25.01: It is recognized that wilderness designation would attract more recreation use. But it is also recognized that wild river

designation would do likewise. Since whitewater boating is the principal primitive recreation activity for the area, wild river designation may in fact cause greater increases than wilderness. No federal or state designated wild, scenic or recreation rivers are under utilized; however, a number of wilderness areas are. As stated in the draft EIS and more specifically in the final EIS, recreation use is expected to increase about the same under a wilderness designation as under a wild river designation (no wilderness)alternative. This increase would be at a greater rate than would be expected for nondesignated areas in the Pacific Northwest (PNW). The EIS estimates boating and backpacking use in designated areas to go up by as much as 140% in 20 years. In nondesignated areas of the PNW, this use increase is estimated at less than 80%.

Comment 25.02: "Another reference in back of Chapter 5 on Page 5. I object to the introduction in the way it is done of your proximity of wilderness, Boise chart, Table 5-2. The suggestion of that table is that there is enormous wilderness acreage proximate to Boise, and therefore there is plenty of recreational opportunities and wilderness areas for Boiseans. I don't think we are talking about only Boiseans using wilderness areas. I think it is meaningful that you can get access from the Boise area if you are coming from other parts of the country and assuming that we continue to have many major air carriers coming into the city -- somebody coming from other parts of the country could go through Boise to get to one of these areas but I have some problems with the view that they take here."

Response 25.02: The BLM Wilderness Study Policy requires an assessment of primitive recreation opportunities in wilderness areas in close proximity to major affected population areas. The simple fact is that Boiseans have a tremendous resource base for wilderness type recreation experience. However, this situation does not detract from the fact that many areas of the country lack opportunities for readily available wilderness experiences. The Bureau would not be recommending additional wilderness close to Boise if it didn't recognize that the desert environment of the Owyhee Canyonlands offer a significant national primitive recreation resource as well as a significant alternative to the vast acreages of forested wilderness experiences around Boise. Though the Owyhee Canyonlands are going to attract use from around the country, the majority of the users are likely to be from the Boise metropolitan area or other major metropolitan areas of the Pacific Northwest.

Comment 25.03: "I have a problem with the assumption that you could[n't] protect any place from ORV use. I think that with proper funding and resources and proper policing you can do it, and I think with proper penalties you can make it so painful to trespass into an area with RV's that it won't happen for a very long period of time. You are also going to have 10 percent of the hunters and 10 percent of the backpackers and cattlemen who are going to be trespassers and who foul up the system for everyone else. We all have that little group in our organizations that can't abide by the rules but to assume that there is nothing you can do about it I think is not necessarily a correct conclusion.

You talk about protectability and definability in that same paragraph of adjusted boundaries yet as I have heard discussed with some of you privately

there are some difficulties with the way some of the boundaries are drawn in some areas. You are talking about trying to draw boundaries between watersheds. This is a difficult process. If you are going to have definable boundaries you are going to have to put up a fence or paint a line on the ground or something."

Response 25.03: See response to written comment 262.01. Watershed boundary breaks have been used in many designated Forest Service wildernessareas. These boundaries usually follow significant or "hard" topographic features which are readily locatable. The watershed breaks on much of BLM's lands are along "soft" topographic features (such as low hills or gently rolling plateaus) which can be difficult to pin-point exactly unless legal subdivisions are used. Because of the location of boundary adjustments, the only people who are likely to need the exact location of the wilderness boundary to prevent unnecessary trespass are BLM personnel involved in such actions as land treatment projects on adjacent nonwilderness lands. The use of legal subdivisions would eliminate individual interpretations of where a wilderness boundary crosses a low hill, etc. Using topographic maps and known section corners, watershed breaks are not difficult to locate even on relatively flat terrain.

30. Bruce Boccard (Committee for Idaho's High Desert), Boise Public Hearing

Comment 30.01: "The Committee for Idaho High Desert, because of our concern for the canyonlands, our concern for the ecosystem and watershed, values of the canyonlands and are sometimes have frustration with the punting process as they elected to look at the entire upper Owyhee River as one unit. As you have heard, no doubt, both from the Chairman of the Committee for Idaho High Desert and others, we are recommending a 1.2 million-acre comprehensive Owyhee Canyonlands Wilderness Proposal.

Now, because we look at the continuous roadless lands of which there are over 2 million acres in the upper Owyhee and examined the wildlife recreation and other resource values of this -- after studying these maps the bighorn sheep habitat and mapping the antelope habitat and other values we are recommending this 1.2 million-acre, out of that 2 million plus block to be designated wilderness. As I indicated earlier this is in several wilderness environmental impact statements, plus incorporates a greater amount of adjoining land.

Just for the record, the acreage that we are recommending for wilderness in the Owyhee Canyonlands E.I.S. is 430,000 acres. We are recommending 82,830 acres to be classified out of the Owyhee E.I.S. area. For the Oregon Statewide Wilderness E.I.S. we are recommending 62,500 acres to be included in the wilderness. Out of the Jacks Creek Wilderness E.I.S., Pole Creek and Deep Creek, Nickel Creek Wilderness Areas we are recommending the entirety of both of those for 36,019 acres.

This gives us a total out of our 1.2 million acre proposal 611,349 acres are currently being studied by the B.L.M. as part of their various wilderness study processes. We are also including in our proposal a 103,603 acres, which were originally recommended by the B.L.M. for wilderness study areas

status. These are areas adjoining the Upper West of the Owyhee Wilderness Study Area as well as surrounding the Owyhee Canyonlands and in Idaho, including Lambert Table, portions of the Deep Creek Battle Creek Wilderness Study Area and other units which originally were recommended as part of the Owyhee wilderness inventory and then dropped as a result of political pressure from the ranching community.

We are including in our proposal 254,342 acres, which is currently under appeal by the Committee for Idaho High Desert or environmental council, theIdaho Conservation Group and which was recommended nonsuitable for wilderness by the B.L.M.

I should probably state in this that one unit of 104[,000] acres was originally recommended suitable for the wilderness study by the Boise-Vale District and overturned by the State Directors. To kind of fill out our proposal, we are including 9,600 acres of a split state of the Owyhee Canyonlands in the State of Oregon. We are including 66,653 acres of intensive inventory land in Idaho that was not given wilderness study recommendation, including 42,077 acres, which conservationists appealed to the Superior Board of Land Appeals and lost.

We are also recommending that 46,400 acres of state land in Oregon, mostly a mile-and-a-half back from the Owyhee Canyon on the east side of the Owyhee River, south of Three Forks be incorporated into this proposal, as well as 30,020 acres of state land in Idaho, and 3,200 acres of state land in Nevada and an estimated 5,000 acres of private land throughout the entire three-state region.

I don't know how your calculations come out but my calculations for the total proposal come out as being 1,170,223 acres, by tallying up these various components."

Response 30.01: See response to written comments 225.01 and 306.01.

Comment 30.02: "Another area that we strongly disagree with is a proposed deletion of 3,440 acres in Idaho's Deep Creek/Battle Creek wilderness study area. I have been own in that area and find that the grass condition there is in excellent condition and have seen a number of wildlife species down in there, some of the best that I have seen within wilderness study areas.

I believe it has high ecological and watershed values and it should be incorporated into wilderness. We also find problems with the logic for the exclusion, which is to -- for management problems. We believe that by closing the area off to the general public and allowing only ranch access the management problems will be solved. We feel that the ecological and other resource values of this area far outweigh the concerns with management that we believe can be resolved elsewhere. We don't see that the proposed solution is going to address the problem, in that the new boundary, which is proposed along section lines and watershed lines which would be virtually impossible to find on the ground."

Response 30.02: The BLM retains its position that the south-central plateau area around Piute Creek basin (2,630 acres; not 3,440 acres) should be eliminated from wilderness designation. The area has relatively low wilderness values as compared to livestock grazing values (see Chapter I, Selection of the Proposed Action). The vegetation is in poor ecological condition. Wildlife species here are no more prominent than they are in many other areas. Proposed wilderness boundaries along legal subdivisions would not be difficult for BLM to find (see response to oral comment 25.03).

42. David Hawk, Boise Public Hearing

Comment 42.01: "..., I would suggest that there is only limited geological evidence that is available here and before we go any further I would ask us to remember that there are gem stones, there are scenic rocks such as jaspers, etcetera that exist and can be commercially accessible, perhaps.

The oil and gas conclusions are not meritorious, especially considering such recent discoveries in volcanic rocks northwest of Wells, Nevada, Traps Springs, Nevada, the multi-million-barrel field and the volcanic rocks in the Great Salt Lake, for instance.

So, the conclusions that were reached, and I will just repeat a couple of them, "It is likely that any associated hydrocarbons were given off during the tursury thermal episodes is not a legitimate conclusion to make in light of the evidence of today's geology and findings across the United States in terms of oil and gas." If that were true then people would not continue to drill here in Southernwestern Idaho as they do. I witnessed a recent Chaplin Test that went to 9,000 feet adjacent to Lake Lowell and encountered noncommercial quantities of hydrocarbons, natural gas, methane.

The question is, do reservoir rocks and source rocks and trap rocks exist in the geologic column covering this area. The answer is that in other areas nearby there are source rocks and reservoir rocks that do exist, nice, clean viable sandstones that could act as reservoirs, and shells that have been tested for their organic maturation content and levels and have been found to be natural gas potential bearing rocks. Consequently, as you can see, there are 166,000 acres leased here. There is more geological work that is needed."

Response 42.01: See response to written comments 146.01 and 156.04.

44. Jim Baker (Sierra Club), Boise Public Hearing

Comment 44.01: "..., I would like to ask why the Upper West Little Owyhee Unit 3-173 was not part of E.I.S. Clearly, it is part of the drainage system and yet does not appear in this study."

Response 44.01: The Oregon State Office of the BLM chose to include all WSAs in one statewide EIS with the exception of WSA OR-3-195. This WSA is contiguous with the Idaho canyonlands WSA ID-16-48B. Though WSA OR-3-173 was not included in the Owyhee Canyonlands Wilderness EIS, its wilderness

recommendation in the Proposed Action of the Oregon Wilderness EIS was coordinated with that of the Proposed Action and other alternatives of the Owyhee Canyonlands Wilderness EIS. The Oregon Wilderness EIS recommends OR-3-173 as suitable for wilderness designation.

Comment 44.02: "... the proposed new boundary [WSA OR-3-195] on the east would be a stateline. I have very seldom seen wilderness values stop on a stateline. ... Turning to Idaho, there is a deletion of some 3,400 acres recommended in the Owyhee River Deep Creek Unit 16-49A. The new boundary follows cadastral lines. This is also a problem for me. I have never seen wilderness values stop at a cadastral line, survey line."

Response 44.02: The eastern boundary of WSA OR-3-195 lies along a fenceline located in the center of a 16-foot wide blading of the stateline between Oregon and Idaho. This blading is used as a road for fence maintenance. Cadastral lines are used in association with "soft" topographic features to clearly delineate the boundary of the wilderness proposal (see response to oral comment 25.03).

62. Randy Morris, Boise Public Hearing

Comment 62.01: "The other point is that with the economy study in Oregon supposedly showing a relatively high potential for mineralization within the Owyhee plateau area, no distinction, of course, is made with the areas within the proposed wilderness boundary and those areas just beyond the boundary. In other words, there is nothing that precludes mineral

exploration or development outside the boundary of the wilderness area. In other words, we can develop if we need to outside the wilderness boundary. We don't have to do it within the inside. I think the document should address that particular point. In other words, if we are going to exclude areas within the wilderness area with potential mineralization, those areas must be compared to the areas outside the wilderness boundary."

Response 62.01: A detailed data base for mineral resources on lands outside the WSAs is lacking. Wilderness study appropriations have permitted only the collection of some field data within the boundaries of the WSAs since the writing of the draft EIS. The BLM cannot assess the availability of mineral resources outside the WSAs to any degree of certainty in order to make a relative judgement between the mineral worth of WSA versus non-WSA lands.

Comment 62.02: "Another suggestion I would make to the final document -- I assume the final document would be in an abbreviated form. I think it would be well to include an overlay in the document which describes where the grazing allotments are located within the area. It is very difficult, with the number of allotments in the area, to know exactly where those fall, and even though you do have some data relating the amount of AUMs that are available under the various alternatives, it is very difficult, if not impossible, to relate those in the field based on document in present form."

Response 62.02: The final EIS provides WSA-specific information regarding livestock management and its impact to vegetation, wildlife and wilderness characteristics. The BLM has added allotment mapping to the final EIS to assist in the environmental assessment.

65. Don Tryon, Portland Public Hearing

Comment 65.01: "I believe in the summary of the EIS, when the comment is made that the relative wilderness values of the WSAs will be one of the issues, it seems to me that there should be some expansion of that discussion throughout the EIS, whether we are speaking about qualitative values or quantitative values of the wilderness characteristics, and break down or cite specific statements within the individual WSAs."

Response 65.01: The assessment of site specific or WSA-specific impacts regarding wilderness characteristics and other resource values has been substantially increased in the final EIS.

Comment 65.02: "Another comment in the summary concerning the No Wilderness Alternative, that no significant social or economic impact would occur as a result of the alternative. It seems to me that the overall tenet of the EIS is that there would be relatively few or no social or economic impacts as a result of any of the alternatives...

If that's true, I find it a little bit surprising that the public would want to spend millions of dollars on this type of review. I think it comes from the the kinds of social science requirements that NEPA speaks directly to."

Response 65.02: NEPA requires the documentation of significant environmental impacts. Some EISs, including many of the BLM wilderness EISs, deal more with significant political issues than they do with the presence of significant environmental impacts. Many of the resources involved in the Owyhee Canyonlands area (including economic and social conditions) are simply not significantly altered whether wilderness is designated or not. Wilderness designation or nondesignation will not significantly alter the social structure of local communities (how people inter-relate) or the economic base of local communities. The fact that someone feels better within themselves because a legal wilderness designation exists or doesn't exist is not a social impact. The changes in economic conditions relating to the WSAs is not significant when compared to those of the total affected local economies.

Comment 65.03: "In terms of the specific alternatives that are available, I am disappointed that an enhanced All Wilderness Alternative is not developed. The All Wilderness Alternative that leaves roads open in the area tends to militate against that alternative in a way that a lot of conservationists find unsatisfactory."

Response 65.03: See response to written comment 205.03.

Comment 65.04: "I was also disappointed that the VRM classification system did not receive more expansion. Also, I think the EIS could be improved significantly by a map in the back, similar to the other maps explained, that showed the VRM classifications for the area and a discussion of what those classifications mean in terms of operationalizing the aspects of them."

Response 65.04: The restructuring of the final EIS caused the elimination of any discussion of VRM classification.

Comment 65.05: "Another weakness, it seemed to me, was that the relative scarcity argument of resources was not developed in a variety of ways, that, for instance, to use an example, hunting, and access for hunting, that is referred to in several of the alternatives, does not have a relative scarcity discussion associated with it in terms of the amount of roaded access, in terms of miles of roads and ways that are accessible for antelope hunting inSoutheastern Oregon or in Southwestern Idaho or Northern Nevada. And that if one of the objectives of this process is the allocation of scarce resources, the only way that can be accomplished is if we know the relative scarcity of resources involved.

So that virtually for every resource, what we should try to do is to identify the relative scarcity of that resource within a fairly clearly defined set of geographic boundaries."

Response 65.05: In our attempts to key in on specific areas we sometimes fail to state what we presume to be obvious or well known by the general public. There are thousands of miles of primitive roads and ways (two-wheel tracks) crisscrossing the desert of southeast Oregon, southwest Idaho and northern Nevada which provide access for the principal recreational activity, hunting. The opportunities for hunting and other resource uses over this broad area have been documented throughout the BLM multiple-use planning process and previous grazing EISs as being relatively plentiful. It is recognized that the WSAs occupy less than 15% of the BLM land base in the three-state area. This fact indicates that lands with wilderness character (wilderness characteristics and other special features) are relatively scarce. When BLM makes an assessment that wilderness character could be jeopardized by conflicting resource development, it considers the relative scarcity of wilderness lands a major concern. Conversely, the losses of some semi-primitive motorized recreation activities or some potential increases in AUM allocations for livestock because of wilderness designation are not be taken as major concerns when compared to the abundant regional resource base.

Because of the relative scarcity of lands with wilderness character, the BLM has taken the position (as stated in both the draft and final Owyhee Canyonlands Wilderness EIS) to optimize the preservation of lands with wilderness character. This position is reflected in multiple-use land management plans by having the majority of WSA lands being recommended as suitable for wilderness designation in the three districts. WSAs or portions of WSAs are eliminated from wilderness proposals only if site-specific conflicts with other resource uses cannot be mitigated through changes in management actions at a given site or through development at an alternative site.

Comment 65.06: "In Table 27, it seems to me that for the most part your ACEC, and Herd Management Area allocations are fairly well defined operationally, except for the case of reservations from mineral entry.

I don't'believe you point out in the EIS that the ACEC and Herd Management Areas do reserve those lands from mineral entry.

Since the Dogami Report points out that there are anomalous mineral resources that have been discovered, on the Oregon side, at least, that there's a possibility of mineral exploration that you don't have any control over under an ACEC or an HMA classification and that the discussion of the potential for pack marks and significant numbers of roads, which you have little or almost no control over under the 1872 mining law should be analyzed as a result of that ACEC and HMA classification as opposed to Wilderness. That I don't believe is done."

Response 65.06: The Proposed Action and No Action (No Wilderness) Alternative/Subalternative, Chapter II of the final EIS have been rewritten, hopefully in a manner which gives the reader a clearer perspective of ACEC, HMA and SRMA management versus wilderness management. The affect of these management options on resources is given greater detail in Chapter IV.

Comment 65.07: "In the economic section, I think there should be a discussion of costs associated with development and/or wilderness protection. The opponents of wilderness have often castigated you people for not indicating how much it costs to manage wilderness. I think that's a legitimate claim and we would also like to see a discussion of how much it is going to cost to develop the lands or manage the lands for nonwilderness purposes. I don't think either one of those are fully done."

Response 65.07: See response to written comment 196.01.

Comment 65.08: "In the discussion of the threatened, endangered and sensitive species, it seems to me as though the range descriptions, numbers of plants, and their status in a more specific sense, and why that status exists, could be a fruitful expansion of the EIS, and certainly could be of interest to the public.

The wildlife section, it seemed to me, could benefit from expansion, specifically in the case of waterfowl, raptor feeding, habitat areas, sage grouse and their use of the plateaus, and passerine birds and their relationships to potential water impoundment."

Response 65.08: See response to written comment 222.01 for plant concerns. See response to written comments 291.03, 306.08 and 356.01 for wildlife concerns.

Comment 65.09: "Also, it seems to me as though the document could benefit from a discussion of the livestock increases that are projected in this area to the livestock increases projected overall as a result of the RPS documents have recently been developed. And I believe in Eastern Oregon that those show an increase of about 85 percent in forage over the long term."

Response 65.09: See response to oral comment 65.05. Grazing EISs have already documented livestock management opportunities throughout the three-district area. The Owyhee Canyonlands Wilderness EIS should not restate environmental assessments from previous EISs. The public must take some responsibility in tracking its concerns from one EIS to another. This tracking process is known as the tiering of EISs.

Comment 65.10: "The deletion of the Toppin Creek Area and the plateaus associated with that are, in my opinion, bogus. The document refers to those areas as not having naturalists but in the State Line Intensive Inventory and the URA Step 3 document, the naturalist in the area is never called into question.

The naturalist discussion in the URA Step 3 document is 11 pages long. It does not substantiate the comments in the Wilderness EIS.

The fact that you argue that roads will impact roads and the use of those roads for maintenance purposes will impact on solitude and recreation, I don't believe is substantiated by the policy direction and the study process, that those activities, in fact, are going to occur on most WSAs, that District Managers, at least in Oregon, have written environmental assessments to produce major dikes and water pipelines projects and reservoirs and those, I assume, will need maintenance as well."

Response 65.10: See response to written comment 262.01. The wilderness study process produced considerably more site specific detail on the assessment of naturalness in the WSAs than did the wilderness inventory. The Toppin Creek area of WSA OR-3-195, as well as most of the rest of the plateau land of that WSA, has numerous range improvements (mostly ways and reservoirs)
which locally impact naturalness. These impacted areas in Oregon total about 14% of the WSA's land base (8% when Idaho lands added) as compared to 6% or less of other WSAs in Idaho and Nevada. Though the naturalness of Oregon WSA OR-3-195 as a whole is still judged to be within limits for wilderness consideration, it is markedly less than that in the WSA lands of Idaho and Nevada.

69. Jeff Crook, Portland Public Hearing

Comment 69.01: "Some of my concerns would be -- I think Mr. Tryon has already mentioned a couple -- but I didn't see much analysis of the social effects and inputs -- and impacts -- of the various alternatives, and I think that's required by NEPA.

And also, I agree, as I seem to write in every single letter, the cost analysis of development and/or wilderness designation I think need to be included at greater depth.

Beyond that, as I said before, raptor habitat is one of my own specific concerns. I think that could have been addressed at a little more length in the EIS or the DEIS.

And my wife has requested that there be a greater explanation and expansion in the section on plant, rare, threatened and just indigenous species.

I also have a concern on the fisheries discussion, which, as I recall, was not too lengthy."

Response 69.01: For social concerns, see response to oral comment 65.02; for wildlife concerns, see response to written comments 291.03, 306.08 and 356.01; for plant concerns see response to written comment 222.01.

79. Andy Kerr (Oregon Natural Resource Council), Portland Public Hearing

Comment 79.01: "There are those who do not particularly care for wilderness who will often cite the high cost of doing these studies and doing this management. I would like to see the Final Environmental Impact Statement look at the cost of wilderness management that the Agency projects and also the cost of non-wilderness management.

And in those costs of non-wilderness management, I would hope that the Bureau would include as costs the additional subsidy that they will be giving to the ranchers if the Agency goes ahead with range and development projects.

Response 79.01: See response to oral comment 65.07.

Comment 79.02: "The sight and sound doctrine, which the Bureau did not invent, but is applying in a new manner, has been of very wide concern to us before, and as Mr. Walicki pointed out, it has been repudiated by Congress on occasion. I think if one was to apply the Forest Service interpretation of sight and sound, or the Bureau of Land Management's interpretation of sight and sound, that applied to several of our existing wilderness areas, not just in Oregon but around the country, the Agency could come to no other conclusion than to say the portions or all of the Three Sisters Wilderness or other areas do not apply."

Response 79.02: See response to written comment 262.01.

80. Bruce McCullough, Portland Public Hearing

Comment 80.01: "..., I was disturbed by the manner in which vegetational and wildlife values were treated in Chapter Three.

The vegetation and wildlife of wilderness areas are primarily physical characteristics and values of the wilderness, not supplemental values. The treatment of the topics on solitude and primitive recreation in a manner that seems to give them a higher priority than the conservation of wildlife habitat I think is wrong and unacceptable.

The highest priority of the wilderness system, I think, should be the designation of portions of this earth where plant and animal communities can evolve through time as free as possible from the influence of mankind. That

priority should be unabashedly expressed in all documents pertaining to wilderness. Incidental to and supplemental to this priority follow the benefits of opportunities for solitude and primitive recreation."

Response 80.01: See response to written comments 291.03, 306.08 and 356.01. The Wilderness Act of 1964 defines a wilderness area as having "special features" or supplemental values which in some cases may be the prime reason for wilderness designation. These special features in the draft EIS included wildlife, vegetation, scenic and cultural resource values. The format for the discussion of wilderness character in the draft EIS was set up to conform to its definition as presented in the Wilderness Act. It in no way gives a priority to solitude and primitive recreation values. One or both of these values, however, must be present if an area is to qualify for wilderness designation. The existence of special features in the Owyhee Canyonlands WSAs is recognized as one of the primary reasons for recommending them suitable for wilderness designation. In the final EIS, reformatting of the document in response to a need to have a more issue-specific analysis should make the document more clear.

81. Bruce Boccard (Committee for Idaho's High Desert), Portland Public Hearing

Comment 81.01: "Having examined the files of the Vale District Office on this particular parcel [Toppin Creek area, 28,000 acres, WSA OR-3-195], we find that in many areas the boundary road that is being used as the proposed wilderness boundary is unidentifiable on the ground. The boundary, as we believe, cuts far too close to the Owyhee River in the northeastern section, eliminating bighorn sheep habitat, raptor feeding areas, and other wildlife habitat. Having the boundary be the state boundary makes no sense to us as resource values seldom stop at state lines."

Response 81.01: See response to oral comment 44.02 regarding stateline boundary concerns. The proposed boundary along the western edge of the eliminated Toppin Creek area is along a vehicle route which meets the definition of a road. This road is part of the transportation network in the Vale District. The boundary can be posted along the road.

Comment 81.02: "In the southwestern tip of the Owyhee Canyon's WSA, BLM is proposing to eliminate about 3,800 acres because of the problems with private in-holdings and a pipeline that has been cherry stemmed.

Again, we oppose this deletion. The BLM says in the draft EIS that the new boundary follows private property lines. This is clearly not the case. Of the new five-mile boundary proposed to delete this 3,800 acres, only one-half mile borders private land.

We believe that, as the ONRC state earlier, that either the lands, or interest in the lands, in other words, development rights, ought to be acquired as an alternative to eliminating the upper portion of Dry Canyon pinching the Owyhee River Canyon and eliminating other plateau values.

Another concern that we have is the extreme western portion of the unit, where approximately 9,600 acres are proposed for deletion, in part because of the impacts of the boundary roads, adjacent private lands and concentration of developments.

Our understanding is that the boundary road that goes to this area is not extensively used. This area is not heavily populated and we do not see why the boundary needs to be pulled back one to three miles from the boundary road in order to create a more manageable boundary.

We find that the proposed boundary would be difficult to find on the ground. Again, it follows cadastral lines in a like way as well as some canyon rim.

We find again that this seems to be part of the bias against plateaus, although some canyon country would be eliminated in this proposal, and we don't see any valid concern for solitude and manageability. Of the 19 miles of the WSA boundary that would be eliminated by the Proposed Action, less than one mile borders private land. The private in-holding initiated in the EIS is only 240 acres, with less than half of that bordering the Wilderness Study Area. Again, we don't see this as problems that are unmanageable.

Finally, we would like to urge that about 30,000 acres of state origin land on the east side of the Owyhee River and in the Soldier Creek Drainage, as well as the state in-holding five miles northwest of the Soldier Creek Drainage, be traded for BLM lands elsewhere in order to lock the ownership along the Owyhee River, because state of origin lands are managed for highest economic return, we believe that there is a potential conflict for forage with bighorn sheep, which have been recently reintroduced into the area."

Response 81.02: The adjusted wilderness boundary in the southwest corner of the WSA (Dry Canyon area) does follow a clustering of three 40-acre private inholdings. These inholdings result in a 2 and 3/4 mile boundary adjustment. The remainder of the boundary is formed by eliminating a water pipeline system which has a maintenance road and a storage tank. The adjusted boundary eliminates the least amount of land possible without creating a configuration problem. The eliminated BLM lands do not have sufficient wilderness characteristics or special features to warrant land acquisition of the private lands affecting the boundary adjustment.

Most of the lands in the west-central portion of the WSA (Antelope Canyon area) have been retained in the Proposed Action of the final EIS.

The BLM Wilderness Study Policy does not permit recommending large tracts of non-federal lands for wilderness designation which lie outside the WSA. The BLM must confine its recommendations to acquiring state or private inholdings or to acquiring adjacent state lands only if the acreage is relatively small and land exchanges are possible. The final EIS has identified those non-WSA (non-BLM) lands which should be designated wilderness.

87. Linda Craig (Audubon Society), Portland Public Hearing

Comment 87.01: "My first point of concern is with your deleting the 28,000 acre plateau on the Toppin Canyon area. You apparently deleted this area to improve manageability but we don't believe that you read the criteria that you listed in the EIS for doing that.

First, as far as we have been able to determine from reading your documents, there are not existing resource developments that significantly locally impact naturalness.

I am going to quote from some of the BLM documents.

The final statewide inventory, for example:

Toppin Creek reservoirs are substantially unnoticeable and the ways are unnoticeable, sagebrush provides screening.

From the Unit Analysis -- Unit Resource Analysis:

Fences are substantially unnoticeable on the plateaus where space is virtually limitless.

Plateaus are flat and vast. All this uninfluenced acreage assures the visitor of high-quality wilderness experience in terms of naturalness in the area.

And from the Draft EIS:

On the plateaus imprints are generally obscured by sagebrush or small changes in topography within 100 feet to several hundred yards.

Your second criterion says that areas deleted because of ORV use have to be lacking in high-quality wilderness values. We certainly don't think that that's the case in this plateau country. We don't know whether that's one of the criteria that you used but the area had to be lacking in high wilderness values in order to be deleted for that reason, and again to quote from the Inventory:

Nearly unlimited outstanding opportunities for solitude, sheer vastness allows one to find solitude. Once out in the sagebrush flats unrepeated hiking, horseback riding, snowshoeing or cross-country skiing can be experienced for many miles. From the plateau one can view the Owyhee Range, the Santa Rosas and the Trout Creeks.

From the Unit Resource Analysis:

Vistas afforded from the flat are nearly unrestricted except for minor screening by the hills, while the views from the hills themselves are unimpeded.

And the Unit Resource Analysis says that:

Seven miles of Toppin Creek provides an additional spectacular canyon environment.

I don't mean to bore you from reading from your own documents, but I think it's important that the record show that the case is very strong against deleting that area.

The Draft EIS says:

Hiking on the plateaus also provides an opportunity to experience vast open spaces stretching into the distant horizon. Because of the miles of canyons and the large size of the plateaus, quality primitive recreation experience can last several days to a week or more.

The other criteria of external influences and private in-holdings don't appear to apply here, so we could find no good reason to delete the Toppin Creek area. We think that you should include it as wilderness because it clearly has wilderness values. There are no major conflicts, economic conflicts or mining conflicts, and we'd like to see the supplemental values in that area given protection.

First, there is an environmentally sensitive plant community at the head of Toppin Creek.

And, second, the Oregon Natural Heritage database describes three of the plant communities that are in the Toppin Creek area as being of high priority, unfilled cells for protection in Oregon.

There are two low sagebrush communities, low sagebrush bunch wheat grass, and low sagebrush Idaho fescue and the silver sage community which the database researchers found at Bull Flat Lake. I don't know in how many other of the playas it exists.

These vegetation communities are in good pristine condition on some portions of the plateau and we think that they should be protected. We would expect them to deteriorate if the area is not declared wilderness.

We also think the plateau needs protection as well as habitat. We know that sage grouse are decreasing in numbers in Oregon and they depend on the sage grass communities on the plateau.

And the number of the passerines, which aren't threatened, but sage sparrows, vesper sparrows, greentailed tohies are a few of the kinds of species that we enjoy in Eastern Oregon and they depend on the sage grass communities. ...

Speaking to another point, we believe that a serious weakness of your Draft EIS is the treatment of impacts on wildlife. Where areas are managed primarily for livestock, particularly where there's seeding, there are major impacts on species such as sage [grouse], small mammals and snakes and pacerine birds."

Response 87.01: For concerns over manageability adjustments and the naturalness and primitive recreation criteria, see response to written comment 262.01 and oral comment 65.11.

The sensitive plant species of concern is Bailey's ivy (Ivesia baileyi). It is located on the highly disturbed area of Stoney Corral along the south-central periphery of WSA OR-3-195. It's extent into the eliminated Toppin Creek portion of the WSA is unknown.

The low sagebrush communities (low sagebrush-bluebunch wheatgrass and low sagebrush-Idaho fescue) are located on as much as 25 to 50% (70,000 acres or more) of the suitable plateau lands of the WSAs, and are there- fore, well represented by the Proposed Action. Silver sage communities are limited in the WSAs but are extensive throughout northern Nevada.

For concerns over wildlife, see response to written comments 291.03, 306.08 and 356.01.

92. Kelly Smith (Sierra Club), Portland Public Hearing

Comment 92.01: "We are disappointed in some of the size and quality of the maps. Primarily, we would like to see topography maps, more larger scale maps, particularly those showing developments and conditions and naturalness of the adjacent parcels of land, plant communities, wildlife habitats, and their ranges.

The archeological and rare plant sites and nesting sites of birds of prey should probably not be shown. That information, I think, is pretty sensitive.

For areas recommended not suitable, we would like to see where the proposed range projects are, the size, extent, and what type of project are we talking about.

If you take a look at the photos to the document, they are, as a previous speaker mentioned, primarily canyonlands. We would like to see more views of plateau lands. It would give people a better feel for what the country is really like."

Response 92.01: Larger scale maps of the Proposed Action and alternatives are presented in the final EIS. Topographic maps (7 1/2 minute USGS) cannot be reduced to a useable size. The base maps used are planimetric maps which show roads and other vehicle tracks and the existing rangeland facilities.

The principal rangeland projects under consideration are land treatments (with some seedings). They would occur primarily in an irregular intermixed pattern throughout the plateau of Idaho, south of the Owyhee River. Site specific locations cannot be mapped at this time, however, seedings would not exceed 25% of the big sagebrush sites outside the ACEC, which would only be about 5 to 10% of the total land base of the WSAs. Rangeland facilities

would be limited and occur to a varying degree in both suitable and nonsuitable areas and would supplement existing facilities without being detrimental to the wilderness character of the WSAs.

The BLM recognizes the scenic quality of the plateau, however, photos of sufficient quality to do the area justice are lacking. The BLM is working on increasing its photo coverage of the WSAs for its wilderness study reports.

94. Julie Kierstead (Native Plant Society of Oregon; Boatnic Gardens), Portland Public Hearing

Comment 94.01: "I would like to talk just briefly about the proposed wilderness from a botanical standpoint. I notice in the EIS you have a list of eight species which are considered threatened, endangered or sensitive, but there are also another ten that I have been able to come up with just on a cursory basis, which are known to occur within the Owyhee watershed, not known for certain to occur within the wilderness study area.

And I will just read the names of these, just for the record:

Ivesia rhypara,
Mentzelia packardise,
Senecia ertterae,
Astragalus mulfordae,
Astragalus sterilis
Mentzelia mollis,
Lapidium davisii,
Trifolium owyheense,
Phacelia lutis mackenzicorum.

... these are the species which are not in the document, they do occur, some of them occur downstream from the proposed area in the Leslie Gulch area of the Owyhee River, there is some of them, anyway, there is no reason to believe that they wouldn't be discovered upstream, it's just that there haven't been botanists in the area. All of the species are considered to be either currently endangered or threatened by the Oregon Natural Heritage Database and they are all, except for one of them, nine out of the ten have Federal candidate status, that is, either enough information has already been in Fish and Wildlife hands to consider them appropriate for listing, that would be in Category 1, or five or them, or six of them, are in Category 2's, which means that they don't have enough information at this time that they would be appropriate for listing."

Response 94.01: See response to written comment 222.01. Known threatened or sensitive plant species found in the WSAs are listed in Chapter III of the final EIS.

97. John Frewing, Portland Public Hearing

Comment 97.01: "The first comment relates to the controls on grazing in the wilderness area. It is my feeling that while grazing may have been discussed in other EIS's, regarding grazing specifically, it seems to me that

this EIS also needs to fully examine the possible control alternatives that are available to the Agency in controlling grazing in wilderness areas so as not to impact wilderness values.

In the EIS, my brief review indicates that you discarded fencing, for example, saying that it is impractical, and that may be so, but the examination of the alternatives, I think, is relatively weak.

With regard to closing roads and so forth, the ability or the -- the ability of the Agency to require access by horseback for ranchers in the area is not discussed.

It seems to me there are a good number of alternatives for controlling grazing in the wilderness area that need further discussion in the EIS.

The costs of some of those alternatives may be substantial, and yet, inasmuch as the Federal government, the Agency, would -- now has a larger budget than the revenue from its grazing, to the extent that revenue from -- to the extent that grazing may be decreased. Perhaps the Agency's budget can also be decreased. That is, there is Federal money that goes into, I will say subsidize, but other people may characterize it otherwise, the grazing program of the Agency.

Response 97.01: Fencing to control livestock use within wilderness would be impractical from the standpoint of cost and management. Fencing could only be used to maintain "time of designation" use levels and not to reduce or exclude livestock use within wilderness designations. Fencing wilderness boundaries would create a number of small, odd shaped and poorly watered pastures. The placement of a water source in a small pasture or its exclusion from a large area would impede proper range utilization. The logistics behind managing these small units would be extreme.

The BLM Wilderness Management Policy implies that customary livestock management practices would be allowed to continue within wilderness areas. If vehicles were used in the management of livestock prior to wilderness designation, their continued limited usage would be permitted if no reasonable alternatives exist. It is difficult to predict whether or not funds would be available to fence wilderness boundaries. The cost of fence construction and annual maintenance may not be warranted in cases where the adverse impacts of livestock grazing can best mitigated by proper range management.

Comment 97.02: "My Comment No. 2 relates to the effort of the Agency to control and negotiate and manage the use of the area by the Department of Defense, the Air Force, and I believe the Navy, also. I notice that you have not distributed a copy of the environmental impact statement to the Navy. It is my understanding that some of their planes also use the area, and they should be included on your distribution list as a memo.

It seems to me that the environmental impact statement ought to examine the alternatives available to the Department of Defense and the Bureau of Land Management for those necessary activities that the Department of Defense carries out in the study areas."

Response 97.02: The Owyhee Canyonlands WSAs are at the core of the southwest Idaho Military Operations Area (MOA) for low-elevation flying of primarily fighter-bomber type aircraft. This area is operated by the Department of Defense at the Mountain Home Air Force Base, Idaho. Environmental assessments concerning the use of air space by the military within the MOA are the responsibility of the Air Force. Since the WSAs are at the core of the MOA, reducing impacts to wilderness values would require stopping flights in the MOA or substantially reducing them. The WSAs can be designated wilderness regardless of how the MOA is currently operated. With a wilderness designation, the Air Force would have to consider impacts to wilderness if it should change its flight operations.

Comment 97.03: "My third comment relates to the valuation of wilderness attributes. People have talked about beauty and things that are pretty non-quantifiable. I think we all agree that we like some of that.

I think your environmental impact statement is relatively crude with respect to attempts to quantify and place a value on those attributes. There is, I think, significant literature on the effort to put value on wilderness attributes and I think in spite of the EIS not having studied it in detail, you folks have by and large kept those attributes in their original, if you will, raw data form, that is, visitor days, and things of that sort, without trying to get down to the point of looking at the costs and benefits overall.

I would urge you to attack that problem with more vigor in the final Environmental Impact Statement.

With regard to these wilderness attributes, I would echo a couple of comments that have been spoken by earlier persons, saying that there is a true economic value to wilderness."

Response 97.03: Although there is considerable literature on the non-market values of wilderness, it has usually focused on Forest Service areas and areas outside of Idaho. The area of non-market values is highly subjective (i.e.: it's all in the eye of the beholder). As such, these types of values are not discussed in this EIS.

102. Roger Scholl (Sierra Club), Reno Public Hearing

Comment 102.01: "These boundaries are specifically outlined in the Conservationist's All Manageable Wilderness Alternative, which we do support, which also provides for a utility corridor between the Owyhee Canyon WSA and South Fork Owyhee, WSA, which would allow for some expansion of additional pipelines through that corridor. But we feel it should be narrowed from the recommendation preferred in the EIS."

Response 102.01: The corridor width along the El Paso Gas Pipeline has been established through the multiple-use planning process to minimize conflicts between resource uses. The narrowing of the corridor could not be done without amending existing land use plans. The issue of utility corridor development through the Owyhee Canyonlands will be dealt with in a state-wide Idaho utility corridor study (see response 258.01).

107. Rose Strickland (Sierra Club), Reno Public Hearing

Comment 107.01: "Now, I have some particular problems with sections on range and wildlife in Chapter II, page eight. The No Wilderness/No Action Alternative proposes crested wheatgrass feeding to benefit livestock and bighorn sheep. I find this comprehensible.

California bighorns must be totally different critters from the desert bighorns I am more familiar with. The thought, the picture of bighorn sheep grazing peacefully with livestock in a crested wheatgrass field, the scene just does not compute.

I feel like some of the other livestock management proposals are contradictory as well as questionable. Number two proposes to separate livestock use from bighorn use by not developing livestock water in bighorn habitat, which I would support. But the plan also states that crested wheatgrass feedings would be developed for bighorns.

Now, does BLM propose to fence out the bighorns? Are you going to have sequential use, sometimes the bighorn, sometimes the livestock? It seems quite a contradictory section, that probably needs to be cleaned up a little bit. I don't know what you mean by it, and you should say what you mean by it one way or another.

Certainly with bighorn sheep, the idea of a crested wheatgrass seeding does not make any sense because the area where bighorn sheep live, are not the areas where the soil characteristics would even permit crested wheatgrass to grow. Maybe it is different up in the plateau country than the landscape cover of the bighorn habitat, I don't even understand why this section was put in there.

Also in Nevada, a one-mile separation between domestic sheep and bighorn, is not enough, because the rams are known to wander ten to twenty miles from their normal habitat. So, the question in my mind is, does the BLM intend to enclose the entire canyon to keep the bighorn sheep in, or the domestic sheep out?"

Response 107.01: The Proposed Action and No Action (No Wilderness) Alternative have been rewritten to hopefully clarify concerns over bighorn sheep/livestock management.

No domestic sheep are allowed to graze in the allotments affected by the Owyhee Canyonlands WSAs. Management of livestock calls for maintaining as much separation between bighorns and livestock as possible. This separation is done by prohibiting new livestock reservoirs in bighorn sheep plateau habitat and by excluding cattle from the canyons wherever possible.

The management objectives under the No Action (No Wilderness) Alternative of the draft EIS should not have implied that non-native grass seedings are a regular management tool for bighorn sheep. The use of land treatments (prescribed burning) with natural revegetation is the principal action planned for restoring ecological condition to plateau vegetation communities

(big sagebrush sites) in areas used by bighorn sheep within the Owyhee River Management Area designation. Though these deep soiled, big sagebrush sites are abundant within the bighorn plateau habitat (about one mile from the canyon rimrock) of the Owyhee Canyonlands WSAs and are excellent locations for drill seedings, such seeding would generally not occur. In the final EIS, management actions under the ORMA designation have been rewritten so that no seedings to non-native species would occur. However, it should be noted that bighorns do eat crested wheatgrass or Siberia wheatgrass when available.

Comment 107.02: "Other alternatives are, due to decreased production of forage, but no deals with decreased livestock use due to over-grazing, although the EIS mentioned that much of the plateaus are in poor to fair condition, apparently due to livestock grazing. I don't feel that it is fair to blame the EIS, to put blame on the WSA. Also, the problem of livestock drift, from nonwilderness parts and a lot went into the wilderness area, presumes no livestock management is occurring in allotment, of which the average size is 105,000 acres.

In other words, livestock management appears to be faulty, regardless of wilderness status, and should be improved, regardless of wilderness status.

Specifically in Chapter IV, page sixteen, there were no benefits of wilderness status listed as to livestock grazing mentioned or calculated. Obviously ignored, are the benefits of decreased rustling due to the decreased motor vehicle access in WSA's, to haul away the cattle. Also not mentioned is the decrease in vandalism, which wilderness status may result in; again, due to the lack of vehicular access. What rancher has not complained vehemently about the off-road users who heaves gates open in the field, in the fall, fouling up grazing management plans, which require livestock or wild horses to be in specific areas, and not in other areas?

I believe, with the wilderness gate closures, people are less likely to vandalize water developments than with vehicular recreationalists. Decrease in rustling and vandalism would create a significant monetary value to WSA's."

Response 107.02: Livestock use adjustments (decreases and increases) based on rangeland condition have been addressed in previous grazing related environmental impact statements and rangeland management programs which cover the subject area.

The occurrence of livestock drift does not imply that no livestock management is occurring in the allotment. Livestock drift is a function of forage and water availability (quality, quantity and distribution). Pasture size and shape, terrain, stocking rate, climatic conditions and class of livestock also influence livestock drift. Livestock management can influence a reduction in livestock drift, but there are many factors which can not be controlled.

To our knowledge, rustling and vandalism is not a significant problem within the WSAs. Wilderness designation would have a negligible influence on problems that are of little occurrence.

Wilderness gate closures were not addressed in the document because the fencing of wilderness boundaries was considered impractical (see response to oral comment 97.01).

117. Bill Bellinger, Elko Public Hearing

Comment 117.01: "... what do you suppose that the people's going to do in this country if you let them in there? What would they do to this country? I am just asking this question because -- The reason I am asking this question is because off and on for the last 50 years I have been going up into the Owyhee desert and I hardly ever see anyone up there except our gang and we have gone up there as many as 40 people in one trip and I did not see that we hurt it a bit. So would you answer me that question, please: What are they going to hurt? How are they going to get down there in the canyon with their vehicles? I am just curious."

Response 117.02: The purpose of the Owyhee Canyonlands Wilderness EIS is to assess impacts to existing resource uses in the affected WSA lands. Chapter IV of the final EIS discusses the impacts of wilderness designation on current semi-primitive motorized recreation activities; it also discusses how the continuation of these activities would affect existing wilderness characteristics.

LIST OF PREPARERS

Name	Position	EIS Responsibilities	Education	Experience
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Rich Conrad	Wilderness Coordinator-Recreation Planner	Document coordination, Alternative formulation, Alternative evaluation, Wilderness	B.S. Natural Resource Management; Humboldt State University M.S. Outdoor Recreation Management; Michigan State University	17 years; BLM; Wilderness Specialist, Recreation Planner, Desert Ranger
Bob Kindschy	Wildlife Biologist	Wildlife	B.S. Wildlife Management B.S. Range Management; University of Idaho	6 years; BLM; Range Conservationist 26 years; BLM; Wildlife Biologist
Shawna Marteney	Range Conservationist	Livestock grazing	B.S. Range Science, Renewable Resources; Texas A&M University	9 years; BLM; Range Conservationist
Mike Holbert	Range Conservationist	Livestock grazing	B.S. Range and Forest Management; Colorado State University	11 years; BLM; Range Conservationist

GLOSSARY

ACRONYMS

AMP - allotment management plan
AUM - animal unit month
BLM - Bureau of Land Management
EIS - environmental impact statement
MFP - management framework plan
ORMA - Owyhee River Management Area
ORV - off-road vehicle
RMP - resource management plan
WSA - wilderness study area

Active Grazing Preference - That portion of the total grazing preference that could be licensed and used should the livestock operator desire.

Allotment Management Plan - A plan that prescribes how livestock operations will be conducted in a grazing allotment.

Animal Unit Month (AUM) - The amount of forage necessary for the sustenance of one cow or its equivalent for a period of one month.

Area of Critical Environmental Concern (ACEC) - An area within the public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

Brush Control - Vegetation manipulation to reduce the amount of shrubs or trees in an area.

Cherrystem Road - A road that penetrates the interior of a WSA but does not divide it into two separate areas.

Ecological Condition - The present state of vegetation in an area in relation to the climax (natural potential) plant community the area is capable of supporting.

Endangered Species - A species considered to be in danger of extinction.

Forage - Browse and herbaceous foods that are available to grazing animals.

Grazing System - The manipulation of livestock grazing to accomplish a desired result.

Land Treatments - Management actions to change the vegetative composition of an area.

Management Framework Plan (MFP) - A BLM planning document that outlines multiple use management objectives for an area.

Naturalness - Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable" (Section 2(c), Wilderness Act of 1964).

ORVs - Any motorized vehicle designed for or capable of cross-country travel.

Prescribed Burning - The controlled burning of vegetation by the BLM to achieve specific multiple-use management objectives.

Primitive Recreation - Nonmotorized and nondeveloped types of outdoor recreational activities in a natural setting featuring a maximum degree of solitude and challenge.

Rangeland Facilities - Any structural or nonstructural improvement which directly affects or supports the use of the forage resource by domestic livestock, such as fences, line cabins, water lines, and stock tanks.

Resource Management Plan (RMP) - A BLM planning document that outlines multiple-use management objectives for an area. RMPs are replacing MFPs within the BLM.

Scoping Process - Public participation process used to identify issues and alternatives to be addressed in the EIS.

Semi-Primitive Motorized Recreation - Motorized recreation activities associated with primitive roads and two-wheel tracks in areas which are otherwise natural or have minimal development.

Sensitive Species - Wildlife species which have been officially designated by the BLM and state fish and game agencies through a Memorandum of Understanding. They are species for which there is concern for their continued existence. Although these species are not in as much jeopardy as endangered or threatened species, further population or habitat declines may result in the more restrictive listing.

Site (Archaeological) - A physical location where primitive and historic human activities or events occurred which can be used to document human history.

Solitude - The state of being alone or remote from habitations; isolation. A lonely, unfrequented, or secluded place.

Special Features (Supplemental Values) - Resources associated with wilderness which contributes to the quality of wilderness areas.

Suitability/Nonsuitability - A recommendation or decision whether to designate or not designate wilderness.

Uncommon Species - Species that are not endangered or sensitive but are uncommon.

Utility Corridor - A land use planning designation where the placement of utility structures, such as powerlines or pipelines, can be considered.

Vegetation Treatments - To change the vegetative composition of an area.

Wilderness Study Area (WSA) - A roadless area that has been inventoried and found to have wilderness characteristics as described in Section 603 of FLPMA and Section 2(c) of the Wilderness Act of 1964.

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APPENDIX A

WILDLIFE SPECIES

Partial Wildlife Species List for the Owyhee Canyonlands WSAs

MAMMALS

Merriam Shrew (Sorex merriami)
Vagrant Shrew (S. vagrans)
Northern Water Shrew (S. palustris)
Myotis Bat (Myotis spp.)
Western Pipestrel Bat (Pipistrellus hisperus)
Big Brown Bat (Eptesiscus fuscus)
Raccoon (Procyon lotor)
River Otter (Lutra canadensis)
Shorttail Weasel (Mustela erminea)
Longtail Weasel (M. frenata)
Badger (Taxidea taxus)
Spotted Skunk (Spilogale putorius)
Striped Skunk (Mephitis mephitis)
Coyote (Canis latrans)
Mountain Lion (Felis concolor)
Bobcat (Felis rufus)
Townsend Ground Squirrel (Citellus townsendii)
Richardson Ground Squirrel (C. richardsoni)
Golden-mantled Ground Squirrel (C. lateralis)
White-tailed Antelope Ground Squirrel (Ammospermophilus leucurus)
Least Chipmunk (Eutomias minimum)
Northern Pocket Gopher (Thomomys talpoides)
Great Basin Pocket Mouse (Perognathus parvus)
Ord Kangaroo Rat (Dipodomys ordi)
Great Basin Kangaroo Rat (D. microps)
Beaver (Castor canadensis)
Western Harvest Mouse (Reithrodontomys megalotis)
Canyon Mouse (Peromyscus crinitus)
Deer Mouse (P. manicutalus)
Northern Grasshopper Mouse (Onychomys leucogaster)
Desert Woodrat (Neotoma lepida)
Sagebrush Vole (Lagurus curtalus)
Muscrat (Ondatra zibethica)
Western Jumping Mouse (Zapus princeps)
Whitetail Jackrabbit (Lepus townsendi)
Blacktail Jackrabbit (L. californicus)
Pygmy Rabbit (Syvaligus idahoensis)
Mule Deer (Odocoileus hemionus)
Pronghorn (Antilocapra americana)
California Bighorn sheep (Ovis canadensis californiana)

Partial Wildlife Species List for the Owyhee Canyonlands WSAs (con't.)

BIRDS

Open Water	
Western Grebe	(Aechmophorus occidentalis)
Eared Grebe	(Podiceps nigricollis)
Open Water (con't.)	
Pied-billed Grebe	(Podilymbus podiceps)
Canada Goose	(Branta canadensis)
Mallard	(Anas platyrhynchos)
Pintail	(Anas acuta)
Gadwella	(Anas strepera)
American Wigeon	(Anas americana)
Blue-winged Teal	(Anas discors)
Cinnamon Teal	(Anas cyanoptera)
Wood Duck	(Aix sponsa)
Redhead	(Aythya americana)
Canvasback	(Aythya vallisineria)
Ring-necked Duck	(Aythya collaris)
Lesser Scaup	(Aythya affinis)
Common Goldeneye	(Bucephala clangula)
Bufflehead	(Bucephala albeola)
Common Merganser	(Mergus merganser)
Ruddy Duck	(Oxyura jamaicensis)
Osprey	(Pandion haliaetus)
Snowy Egret	(Egretta thula)
Great Blue Heron	(Ardea herodias)
White-faced Ibis	(Plegadis chihi)
American Avocet	(Recurvirostia americana)
Willet	(Catoptrophorus semipalmatus)
Wilson's Phalarope	(Phalaropus tricolor)
Riparian	
Spotted Sandpiper	(Actitis macularia)
Belted Kingfisher	(Ceryle alcyon)
Common Flicker	(Colaptes auratus)
Tree Swallow	(Tachycineta bicolor)
Violet Green Swallow	(Tachycineta thalassina)
Black-capped Chickadee	(Parus atricapillus)
Marsh Wren	(Cistothorus palustris)
Yellow Warbler	(Dendroica petechia)
Yellow-rumped Warbler	(D. coronata)
Common Yellowthroat	(Geothylypis trichas)
Yellow-breasted Chat	(Icteria virens)
Wilson's Warbler	(Wilsonia pusilla)
Yellow-headed Blackbird	(Xanthocephalus xanthocephalus)
Brown-headed Cowbird	(Molothrus ater)
Lazuli Bunting	(Passerina amoena)
Chipping Sparrow	(Spizella passerina)
American Tree Sparrow	(Spizella arborea)

Partial Wildlife Species List for the Owyhee Canyonlands WSAs (con't.)

BIRDS (con't.)

Sagebrush Plateau/Canyon

California Quail	(Callipepla californica)
Sage Grouse	(Centrocercus urophasianus)
Chukar	(Alectoris chukar)
Killdeer	(Charadrius vociferus)
Mourning Dove	(Zenaida macroura)
Common Poorwill	(Phalaenoptilus nuttallii)
Common Nighthawk	(Choradeiles minor)
White-throated Swift	(Aeronautes saxatalis)
Western Kingbird	(Tyrannus verticalis)
Says Phoebe	(Sayornis saya)
Gray Flycatcher	(Empidonax wrightii)
Rock Wren	(Salpinctes obseletus)
Sage Thrasher	(Oreoscoptes montanus)
Western Bluebird	(Sialia mexicana)
Shrikes	(Lanius spp.)
Black-throated Sparrow	(Amphispiza bilineata)
Western Meadowlark	(Sturnella neglectra)
Lark Sparrow	(Chondestes grammacus)

RAPTORS: Using all three habitat types (open water, riparian, sagebrush plateau/canyon)

Turkey Vulture	(Cathartes aura)
Northern Harrier	(Circus cyaneus)
Rough-legged Hawk	(Buteo logopus)
Ferruginous Hawk	(Buteo regalis).
Red-tailed Hawk	(Buteo jamaicensis)
Swainson's Hawk	(Buteo swainsonii)
Golden Eagle	(Aquila chrysaetos)
Bald Eagle	(Haliaeetus leucocephalus)
Prairie Falcon	(Falco mexicanus)
American Kestrel	(Falco sparverius)
Merlin	(Falco mexicanus)
Western Screech Owl	(Otus kennicottii)
Great horned Owl	(Bubo virginianus)
Barn Owl	(Coccyzus americanus)
Burrowing Owl	(Athene cunicularia)
Common Raven/Crow	(Corvis spp.)

Partial Wildlife Species List for the Owyhee Canyonlands WSAs (con't.)

AMPHIBIANS/REPTILES

Tiger Salamander	(Ambystoma tigrinum)
Great Basin Spadefoot Toad	(Scaphiopus intermontanus)
Western Toad	(Bufo boreas)
Pacific Tree Frog	(Hyla regilla)
Northern Leopard Frog	(Rana pipiens)
Bullfrog	(Rana catesbeiana)
Longnose Leopard Lizard	(Gambelia wislizenii)
Horned Lizards	(Phrynosoma spp.)
Sagebrush Lizard	(Sceloporus graciosus)
Great Basin Fence Lizard	(Sceloporus occidentalis)
Northern Side-blotched Lizard	(Uta stansburiana)
Great Basin Whiptail	(Cnemidophorus tigris)
Rubber Boa	(Charina bottae)
Western Yellow-bellied Racer	(Coluber constrictor)
Desert Striped Whipsnake	(Masticophis taeniatus)
Great Basin Gopher Snake	(Pituophis melanoleucus)
Common garter snake ("Valley" subspecies)	(Thamnophis sirtalis)
Western Terrestrial Garter Snake	(Thamnophis elegans)
(Western) Great Basin Rattlesnake	(Crotalus viridis)

FISH

Redband Trout	(Salmo spp.)
Mountain Whitefish	(Prosopium williamsoni)
Northern Red-sided Shiner	(Richardsonius balleatus)
Northern Squawfish	(Prychocheilus oregonensis)
Snake River Speckled Dace	(Rhinichthys osculus)
Bridge Lip Sucker	(Catostomus columbianus)
Largescale Sucker (in South Fork)	(Catostomus macrocheilus)
Smallmouth Bass	(Micropterus dolumieui)
Belding Sculpin	(Cottus beldingi)

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