



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

Lakeview District Office
1000 S. 9th
P.O. Box 151
Lakeview, Oregon 97630

May 1988



Warner Lakes Plan Amendment for Wetlands and Associated Uplands

Plan Amendment and Environmental
Assessment for the Warner Lakes
Management Framework Plan





United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Lakeview District Office
1000 South 9th, P.O. Box 151
Lakeview, Oregon 97630

May 20, 1988

Dear Concerned Citizen:

Thank you for your interest in our effort to amend the Warner Lakes Management Framework Plan (MFP) for the Warner Valley Wetlands and Associated Uplands. The enclosed environmental assessment addresses six alternatives for management of the Warner Valley Wetlands.

The purpose of the environmental assessment is to disclose the probable environmental impacts of the alternatives proposed for management of BLM-administered lands on the Warner Valley Wetlands. We would appreciate your comments on the adequacy of the analysis. The following are types of comments which will be most helpful in the **decision** process: 1) be specific as **possible**; 2) address appropriateness of **alternatives**; 3) identify unaddressed issues; 4) provide new information; 5) address adequacy of analysis; and 6) identify errors in data or analysis.

Two public open house meetings will be held to discuss provisions of the plan amendment and answer questions from the public. The first meeting will be held on July 19, 1988 at 1:00-5:00 p.m. and 7:00-9:00 p.m. in the conference room of the Lakeview District Office, 1000 South Ninth Street, Lakeview, Oregon. The second meeting will be held July 21 at 2:00-5:00 p.m. and 7:00-9:00 p.m. at the Red Lion/Lloyd Center, 1000 N.E. Multnomah, Portland, Oregon.

Public comments may be submitted at the open house meetings or sent to the Lakeview District Office. Written comments should be submitted by July 31, 1988, to:

Judy Ellen Nelson
District Manager
Bureau of Land Management
Lakeview District Office
P.O. Box 151
Lakeview, Oregon 97630

Based on information contained in the environmental assessment, a preliminary finding of no significant impact is presented, and concludes that an environmental impact statement is not necessary and will not be prepared.

Preliminary issues, a draft of planning criteria and possible alternatives for potential landownership adjustments were identified in a planning newsletter dated May 15, 1987. We received 87 comment letters from members of the public, other government agencies and conservation groups. There were numerous concerns and suggestions which have been incorporated into this Plan Amendment/EA. As a result of this public input, we feel this document portrays the best array of alternatives concerning public land tenure adjustments.

If you would like further information about the MFP amendment process beyond what is presented in this publication, please contact the District Planning Coordinator at 947.2177.

We appreciate the amount of public involvement to date, and encourage a continued interest in the management of public lands.

Sincerely yours,


/Judy Ellen Nelson
Lakeview District Manager

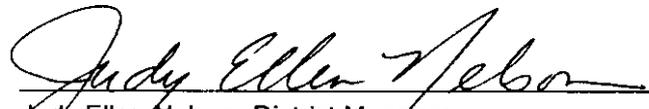
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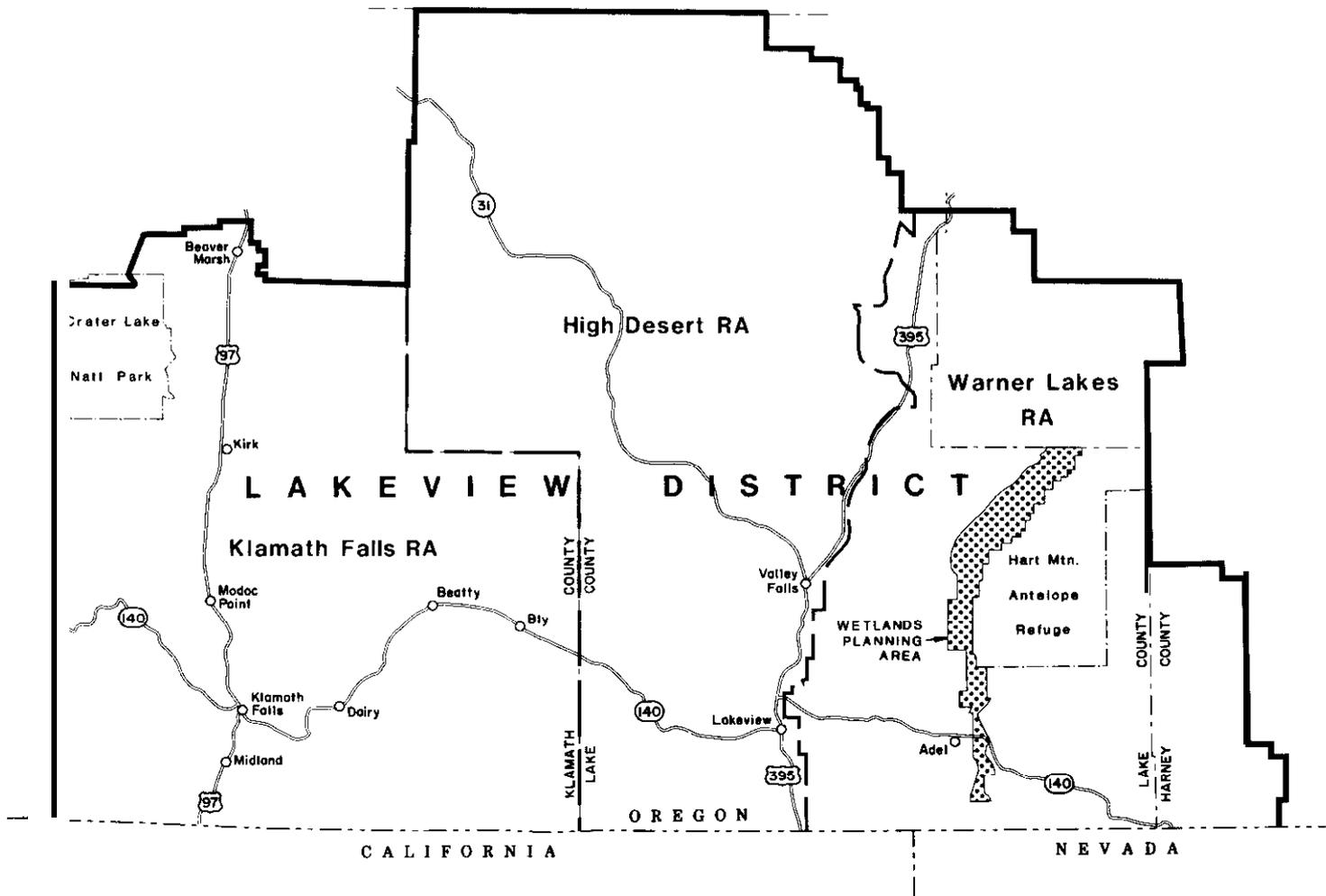
**Plan Amendment and Environmental Assessment
for the Warner Lakes Management Framework Plan**



Charles W. Luscher, State Director,
Oregon State Office



Judy Ellen Nelson, District Manager,
Lakeview District Office



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



LAKEVIEW DISTRICT

1988

WARNER LAKES RESOURCE AREA

General Location
and
Wetlands Planning Area

MAP 1

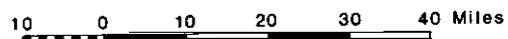
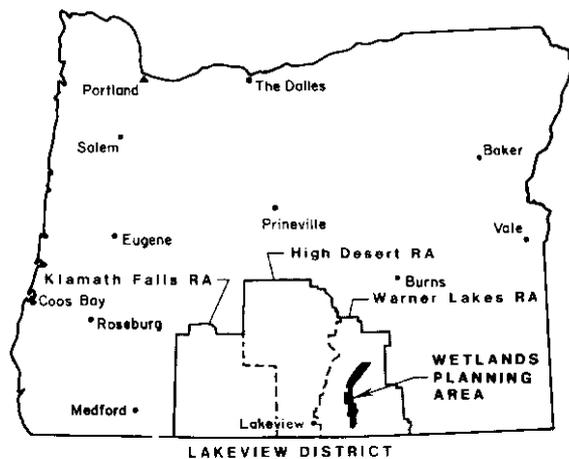


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Chapter I Introduction

Purpose and Need

The Warner Lakes Management Framework Plan (MFP) was approved in 1983. The 1983 plan made land use allocations and provided management direction in the Warner Lakes Resource Area. The existing guidance in the **MFP does** not accommodate or assess significant program changes addressed in the proposed plan amendment and environmental assessment.

The purpose and **need** for this document is to review potential changes in management in the Warner Lakes Resource Area. Potential actions addressed in the proposed amendment, not included in the original MFP include: designation of an Area of Critical Environmental Concern (**ACEC**), adjustments in livestock grazing, and increased emphasis on wildlife habitat protection within wetlands.

Due to initiatives by groups outside the BLM, Congress has allocated one million dollars of Land and Water Conservation Fund moneys for the acquisition of lands in the Warner Valley to be managed for conservation purposes. This document will provide general direction and analysis for management of acquired lands, as site specific actions may depend upon resolution of final acquisition contract specifications.

This proposed Plan Amendment and associated Environmental Assessment is required by BLM regulations and provides for public involvement, and state and local government coordination. The Plan Amendment, when completed, will provide guidance for BLM management in the Warner Valley during the next **2–10** years, or until the entire management plan is revised or replaced.

Location

The plan amendment specifically addresses the wetlands and associated upland environments in the Warner Valley. For purposes of this amendment, wetland habitat will be defined as permanently wet or intermittently flooded areas where the water table is at, near, or above the soil surface for extended intervals. Marshes, shallows, swamps, shallow lakes and lake bogs are examples of wetlands.

The Warner Valley Wetlands start north of Plush, Oregon, and extend southward to a point east and south of **Adel**, Oregon. The Warner Valley lies approximately 40 miles east of **Lakeview**, Oregon. The planning area is generally bordered by Fish Creek Rim and the Rabbit Hills on the west, the **Lake–Harney** County line on the north. **Hart** Mountain National Wildlife Refuge and Coleman Rim on the east and the southern reach of Coleman Lake on the south. Map 1 and Table 1 show the location and land ownership pattern in the planning area.

Planning Process

This document presents and analyzes associated environmental consequences for an amendment to the Warner Lakes **MFP** for the **Lakeview** District. The amendment has been prepared using the Bureau Planning System. Initial steps of the planning process included identification of issues and development of planning criteria. Issues were identified through **public comments** and focused on concerns and needs, as well as opportunities for resource use, development and protection. Planning criteria were based on BLM's policy and guidance, applicable laws, the results of public participation, interdisciplinary team input and coordination with other federal agencies, state and local governments.

Issues and planning criteria were identified in a May 15, 1987

planning report, and the public scoping process conducted during May through July, 1987.

Detailed information on the development of the Plan Amendment is available at the **Lakeview** District Office.

Conformance Statement

Except for the No Action Alternative, the alternatives analyzed in the Plan Amendment and Environmental Assessment do not conform to the existing Warner Lakes MFP.

Planning Criteria and Issues

Legal Guidelines

Administration of the Bureau of Land Management, **Lakeview** District, is guided primarily by the Federal Land Policy and Management Act of 1976 (FLPMA) (90 Stat. 2743 USC 1701).

The following are pertinent major provisions of FLPMA:

1. Under the principles of multiple use and sustained yield, BLM has broad management responsibility over Federal lands;
2. Comprehensive land use planning will be accomplished in order to properly Utilize the lands and the resources they contain;
3. Management activities will strive to protect scientific, scenic, historical, ecological, environmental, air and atmosphere, water, and archaeological values.

In addition to this overall policy, the following State and Federal laws and policies also direct and constrain management of specific resources and activities in the Warner Wetlands area.

National Environmental Policy Act of 1969 (NEPA).
Executive Order **11514—Protection and Enhancement of Environmental Quality.**
Land and Water Conservation Fund Act of 1974.
Taylor Grazing Act of 1934.
Mining Law of 1872.
Mineral Leasing Act of 1920, as amended.
Mineral Material Sales Act, 1955.
Mining and Minerals Policy Act of 1970.
Geothermal Steam Act of 1970
Executive Order 11644, Use of Off-Road Vehicles on the Public Lands (1972).
Antiquities Act of 1906.
Historic Sites Act, 1935.
Historic Preservation Act of 1966.
Executive Order 11593, Protection and Enhancement of the Cultural Environment.
Archaeological Resource Protection Act of 1979.
Endangered Species Act of 1973.
Fish and Wildlife Coordination Act of 1958.
Sikes Act of 1974.
Soil and Water Resources Conservation Act of 1977.
Executive Order 11990, Protection of Wetlands.
Clean Water Act of 1977.
Oregon Land Use Act of 1973.

Issues

Major issues identified through Bureau review and the public scoping process include:

Allocation of Use for Livestock Grazing

Wetland Management for Wildlife Habitat Protection or Enhancement

Designation of Area of Critical Environmental Concern

Land Tenure Adjustments to Facilitate Management

Table 1: Land Ownership in **MFP Amendment** Area by Allotment

Allotment No.	Allotment Name	Total Acres BLM	Total Acres Other
205	Greaser (Part)	3,264	125
212	Rahilly-Gravelly (Part)	4,420	0
219	Cahill	470	0
222	Fisher Lake (Part)	1,430	656
501	Flynn (Part)	195	1,260
502	Fitzgerald (Part)	265	160
504	Kiely	390	0
507	Laird	2,030	0
512	N. Bluejoint (Part)	6,160	1,320
523	Warner Lakes	39,653	4,765
	Unallotted — Hart Lake	77	N/A
	Unallotted — Crump Lake	340	N/A
	Unallotted — Mugwump Lake	152	N/A
	Unallotted -Anderson Lake	50	N/A
	Unallotted -Greaser	112	N/A
		<u>59,068</u>	<u>8,306</u>

Decision Making

The decision-making process considers public views and **concerns**, present and potential uses of the public lands in the Warner Valley Wetlands, long-term benefits to the public as opposed to short-term **benefits**, and State and local plans and goals. Consequently, the final decision **could** accept any **alternative** as presented in the proposed plan, or a combination of the alternatives analyzed.

The decision, when implemented, will provide **specific** uses for each land-use allocation. Future specific projects (such as wildlife or livestock improvement projects, recreation access sites, etc.) may be subject to Environmental Assessment or other analytical processes as required.

Chapter 2 Proposed Alternatives

The following alternatives present a range of management opportunities within the Warner Wetlands. Alternative 1 represents continuation of current management direction. Alternatives 2.3 and 4 present opportunities to emphasize particular resource elements. Alternative 5 addresses the nomination of the area as an Area of Critical Environmental Concern. Alternative 6, the preferred alternative, represents a combination of management opportunities selected by a" interdisciplinary team of resource professionals from alternatives 1-5. The preferred alternative was chosen to optimize resource management within the planning area relative to the varying habitat types, productivities, and potentials identified in the accompanying environmental analysis for the planning area.

The activities and uses addressed in the plan are broke" into three general categories specific to this plan:

Permitted uses are actions approved through existing plans, regulations, policies or laws over which the manager has little or no discretionary authority.

Conditional uses represent actions that may or may not be approved within the planning area based upon site specific environmental reviews on a case by case basis.

Prohibited uses represent actions which would be denied to implement the goals and objectives of this plan specific to the wetland planning area.

Alternative No. 1: No Action, Maintain Present Situation

Goal: Continue to follow the existing Management Framework Plan direction for livestock management, wildlife, recreation, along with other uses.

Objectives

1. Maintain current livestock grazing management systems, and season of use for those allotments listed in Table VI of this amendment.
2. Maintain current recreation and cultural resources opportunities within the area.
3. Maintain current wildlife habitat opportunities.

Permitted Uses

1. Maintenance of existing sites, buildings, roads and structures, not requiring additional surface disturbance.
2. Vehicle operations under current "Open" designation.
3. Recreational uses of a nature not requiring a permit.
4. Maintenance of range improvement projects, such as fences, pipelines and wells, to facilitate livestock grazing.

Conditional Uses

1. Development of recreation and cultural interpretive facilities.
2. Road, **powerline**, or pipeline rights-of-way and easement grants.
3. Recreational use requiring a permit or special authorization.
4. **Scientific** investigations, collections, and excavations.
5. Development of Wildlife habitat protection and enhancement projects.
6. Livestock grazing in accordance with Bureau policy and within multiple use guidelines.
7. Development of range improvements.
8. Material sales and mineral leases.
9. Grant rights of way, leases and permits.

Prohibited Uses

The following uses and actions are prohibited under the current Management Framework Plan for the Warner Lakes Resource Area. (Some of these elements are prohibited because they are excluded from consideration in the current MFP.)

1. Restriction of public access, except in emergency.
2. Acquisition of private or State lands for wildlife management purposes, or wetland protection.
3. Reductions in livestock grazing use levels to enhance wildlife habitat management.

Alternative No. 2: Primary Emphasis on Wildlife Habitat with Provisions for Other Uses

Goal: To place primary emphasis on wildlife habitat protection or enhancement, while providing opportunities for other uses.

Wetland Objectives

1. Improve approximately 14,000 acres of poor and fair condition wetland habitat at least one condition **class** by 1996.
2. Maintain wetland habitat in **good** condition on approximately 2,000 acres.
3. Determine the habitat condition on approximately 2,000 acres of unsampled wetlands, which would then be managed under objectives 1 or 2 **above**, depending on condition class.

Permitted Uses

1. Maintenance of existing sties, buildings, roads and structures, not requiring additional surface disturbance.
2. Vehicle use of designated roads and trails only.
3. Recreational uses of a nature not requiring a permit.

Conditional Uses

1. Limited site development for recreation and livestock management facilities.
2. Recreational use requiring a permit or special authorization.
3. Scientific investigations, studies, collections **and/or** excavations.
4. Development of wildlife habitat protection or enhancement projects.
5. Livestock grazing based on management practices designed to achieve the wetland and upland objectives of this alternative.
6. Acquisition of private **and/or** State wetlands and associated uplands which would benefit the management objective.

Prohibited Actions

1. Vehicle travel off existing roads and trails.
2. Land disposal.
3. Surface occupancy of wetland portions of mineral leases.
4. Disposal of salable materials, including but not limited to sand, gravel, rock and vegetation.
5. Rights-of-way and easement grants for roads, **powerlines**, and pipelines.
6. Grazing of existing wildlife enclosure areas.

Upland Objectives

1. Improve approximately 40,000 acres of fair and **poor** condition upland habitat one condition class.
2. Maintain upland habitat in good condition on approximately 1,000 acres.

Permitted Uses

1. Maintenance of existing sites, buildings, roads and structures not involving new surface disturbance.
2. Vehicle use of designated roads and trails.
3. Recreational uses of a nature not requiring a permit or other authorization.

Conditional Uses

1. Development of recreational and **cultural interpretive facilities**.
2. Granting of permits for road, **powerline**, or pipeline **rights-of-way** or easements.
3. Recreational use requiring a permit or special authorization.
4. Scientific investigations, collections, and excavations.
5. Development of wildlife habitat protection and enhancement projects.
6. Livestock grazing based on management practices designed to achieve the wetland and upland objectives of this alternative.
7. Material sales and mineral leases.
9. Land acquisition, exchanges or disposal which would enhance management.

Alternative No. 3: Primary Emphasis on Range Condition for Livestock Grazing

Goal: To provide for increased livestock forage production, while maintaining or improving the condition of the present vegetative communities.

Objectives

1. Improve 53,020 acres of poor condition rangeland at least one condition class and 4,244 acres of fair condition rangeland one condition class by 2008.
2. Maintain 611 acres of good condition rangeland.
3. Determine the range condition on 462 acres of rangeland and improve **or** maintain those conditions based on findings.
4. Make available for livestock grazing at least 3,167 **AUM's** of forage, which constitutes a 415 AUM increase over current active preference, to accommodate suspended non-use within the planning area by the year 2006.

Permitted Uses

1. Maintenance of existing sites, buildings, roads and structures not requiring additional surface disturbance.
2. Vehicle use of designated roads and trails.
3. Recreational uses of a nature not requiring a permit.
4. Maintenance of range improvements to facilitate livestock grazing.

Conditional Uses

1. Development of recreational and cultural interpretive facilities.
2. Granting of permits for road, powerline, or pipeline rights-of-way or easements.
3. Recreational use requiring a permit or special authorization.
4. Scientific investigations, collections, and excavations.
5. Development of wildlife habitat protection and enhancement projects.
6. Livestock grazing based upon a grazing system which could include allowing temporary nonrenewable **and/or** permanent increases as evaluated and approved through Bureau monitoring studies
7. Development of range improvements to facilitate livestock grazing, such as seedlings, fences, pipelines and wells..
9. Material sales and mineral leases.
9. Land **acquisition**, exchanges **or** disposal which would enhance management.

Prohibited Uses

1. **Restriction** of public access except in emergency
2. **Introduction** of any exotic species not compatible with livestock grazing management.

Alternative No. 4: Maximize Wildlife Habitat; Exclude Conflicting Uses

Goal: Improve wildlife resource values eliminating all conflicting uses, demands, and allocations.

Objectives

1. Protect, maintain, expand and improve wildlife habitats on 16,004 acres of BLM-administered wetlands within the planning area. Manage these wetlands as wildlife habitat, to the exclusion of any conflicting **or** consumptive use not directly **benefitting** or enhancing wildlife habitat.
2. Protect, maintain, expand and improve wildlife habitats on 41,064 acres of BLM-administered uplands within the planning area. Manage these lands primarily for wildlife habitat, and secondarily for recreation, and scientific activities not adversely affecting these wildlife habitats. Other competitive **or** consumptive uses of these lands are excluded.

Wetlands

Permitted Uses

1. Maintenance of existing roads, sites, and facilities which do not conflict with wildlife management goals.
2. Recreational uses of a nature not requiring a permit.

Conditional Uses

1. Limited recreation site development, such as a boat ramp into the wetlands where the **primary** site development is on adjacent uplands, and the placement of interpretive and directional signs.
2. Development of wildlife habitat protection and enhancement projects.
3. Recreational uses requiring a permit **or** special authorization.
4. **Scientific** investigations, studies, collections **and/or** excavations.
5. Use of designated roads and trails. (All roads and trails will be subject to closure March 1 to July 31 to protect nesting birds.)
6. Land acquisition, exchange or disposal which would enhance management.

Prohibited Uses

The following uses are **prohibited** on wetlands:

1. Domestic livestock grazing.
2. Vehicle travel off existing roads and trails.
3. Land disposal.
4. **Surface** occupancy of wetland portions of mineral leases.
5. Disposal of salable materials, including but not limited to sand, gravel, rock and vegetation.
6. Granting of permits for rights-of-way or easements for roads, **powerlines**, and pipelines not specifically required to manage for the purposes identified in this alternative.

Uplands

Permitted Uses

1. Maintenance of existing sites, buildings, roads and structures not requiring additional surface disturbance.
2. Use of designated roads and trails only.
3. Recreational uses of a nature not requiring a permit **or** special authorization.

Conditional Uses

1. Development of recreational and cultural interpretive facilities.
2. Development of wildlife habitat protection and enhancement projects.
3. Granting of road, **powerline** and/or pipeline rights-of-way.
4. Scientific investigations, collections and excavations.
5. Off-road vehicle use where not found to be in conflict with wildlife habitat management goals on uplands.

6. Materials sales and mineral leases.
7. Land acquisition, exchange or disposal which would enhance management.

Prohibited Uses

1. Domestic livestock grazing.
2. Any project, development, grant or lease having a cumulative net negative impact on the wildlife habitat of the upland or wetland areas.

Alternative No. 5: ACEC Designation for the Warner Lakes Pothole Area

Introduction

On February 27, 1987, the Lakeview District received a nomination from The Nature Conservancy to create an Area of Critical Environmental Concern (ACEC) in the Warner Lakes Potholes area. It was stated that values were present having relevance and importance as outlined in the ACEC guidelines. In order to assess the merits of the nomination, an interdisciplinary team was assembled from the Lakeview District staff. Information was gathered on wildlife, cultural, geologic, and threatened and endangered species values in the area nominated. On March 16, 1987, the Warner Lakes Resource Area Manager concluded that these values had relevance and importance as prescribed in the ACEC guidelines. It was recommended that the nomination continue through the BLM planning process in the Warner Lakes Wetlands Amendment. The proposed boundary as presented here differs slightly from that of The Nature Conservancy nomination, as some acreage in the southern and eastern part were dropped, while other acreage was added in the south and north. The changes were made to encompass only lands clearly having unique values and define a manageable boundary.

Goal: The ACEC designation will emphasize the need for preservation and protection of unique wildlife, ecological, cultural and geological values identified within the Potholes area.

Objective

Maximize preservation of high resource values in the Potholes area and incorporate positive public participation in management direction for this area.

Permitted Uses

1. Maintenance of existing roads, rights-of-way and facilities,
2. Installation of signs for travel and information.
3. Recreational uses not requiring a permit.
4. Vehicle use on designated roads and ways only.

Conditional Uses

1. Development of limited recreational and cultural interpretive facilities, i.e., boat ramps, sanitation facilities, etc.

2. Dune and slough stabilization to stop erosion if not in conflict with other resource values within the ACEC.
3. Recreational use requiring a permit.
4. Scientific investigations, collections, and excavations by appropriate permit consistent with the protection of ACEC values.
5. Wildlife habitat developments, i.e., seedings, nesting facilities, water control, etc., consistent with values within the ACEC.

Prohibited Uses

1. Livestock grazing.
2. Vehicle travel off existing roads and trails.
3. Rights-of-way grants or mineral leases that are inconsistent with ACEC goals.
4. Material sales.

Alternative No. 6: Preferred Alternative

The preferred alternative for management of the Warner Wetlands areas calls for an interdisciplinary management regimen utilizing a mixture of opportunities identified in the preceding five alternatives including the opportunity to acquire wetlands within the entire planning area. The preferred management by allotment is as follows: (See maps 3 through 5).

Allotment 205 Greaser Drift (portion of allotment)

Those portions of the allotment currently fenced and being managed for wildlife habitat will be managed under the guidance offered in Alternative 4. The remainder of the allotment within the planning area will be managed under the guidelines in Alternative 1 (see map 3).

Allotment 212 Rahilly-Gravelly (portion)

All portions of this allotment within the wetlands planning area, except for existing enclosures at Foskett and Dace Springs will be managed under the guidelines in Alternative 1. The Foskett and Dace Spring enclosures will remain excluded from this grazing allotment.

Allotment 219 Cahill

The entire allotment will be managed under the guidelines in Alternative 2.

Allotment 222 Fisher Lake (portion)

That portion of the allotment within the wetlands planning area currently fenced and being managed for wildlife habitat will be managed under the guidelines in Alternative 4. The remaining portion of the allotment within the wetlands planning area will be managed under guidelines in Alternative 1 (see map 3).

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Bureau of Land Management

LAKEVIEW DISTRICT

March 1988

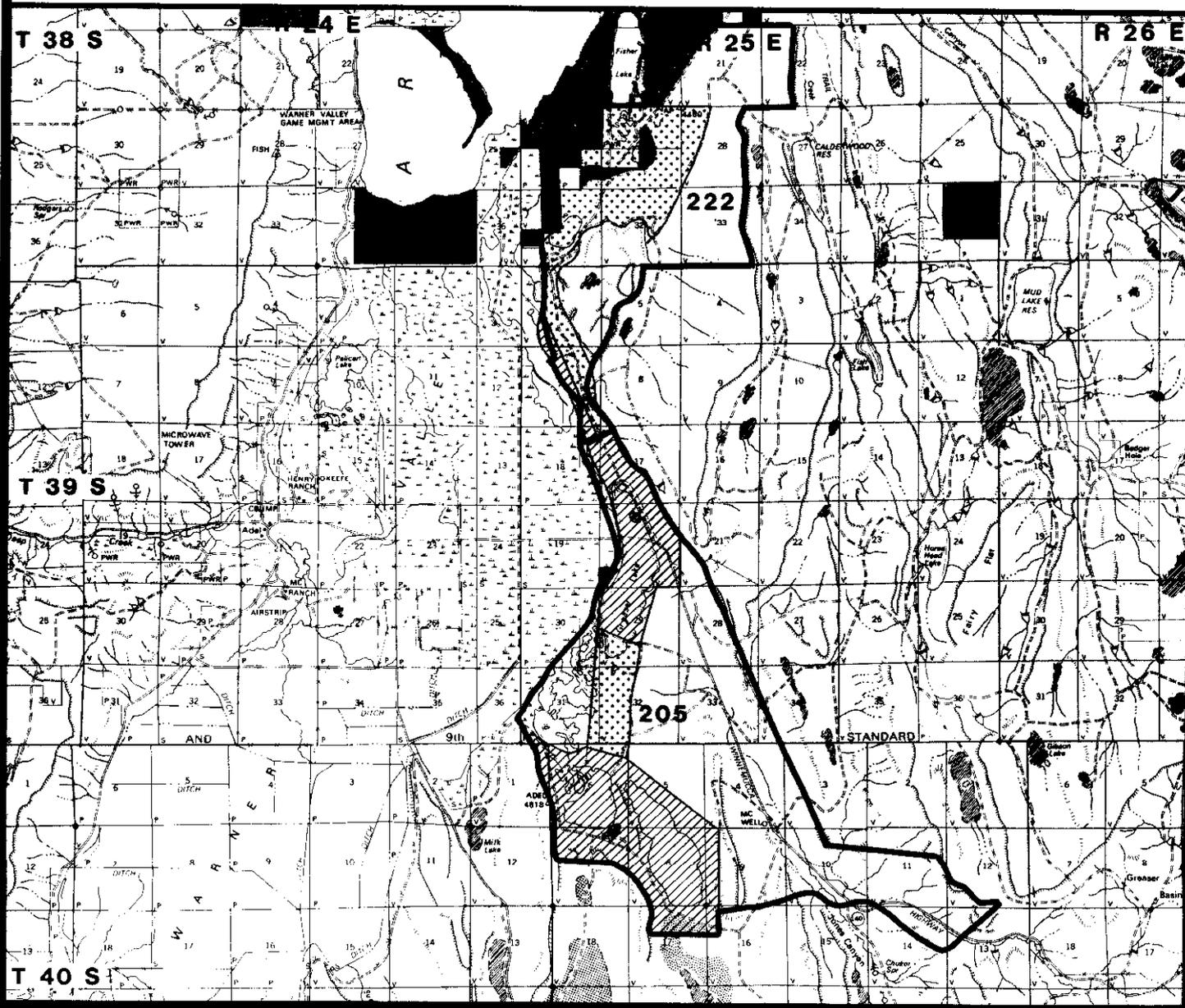
WARNER LAKES RESOURCE AREA
Allotment 205 & 222 Alternatives

MAP 3

LEGEND



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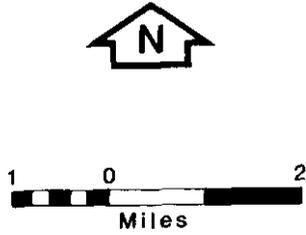
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March 1988

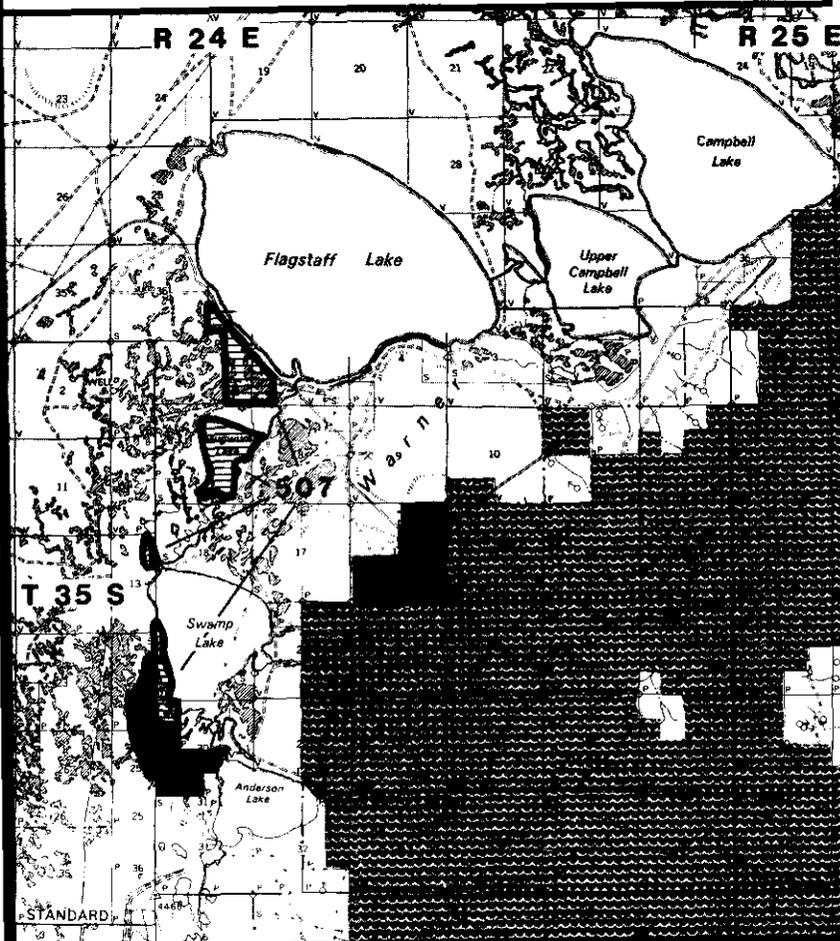
WARNER LAKES RESOURCE AREA
 Allotment 507 Alternatives

MAP 4

LEGEND



- Allotment Boundary
- Allotment Number
- Alternative 1
- Alternative 4
- Alternatives 4 & 5
- BLM Land
- USFWS Land
- State Land
- Private Land

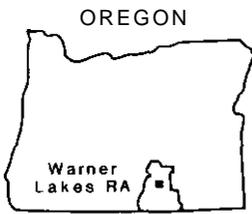
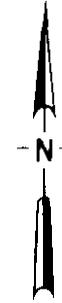


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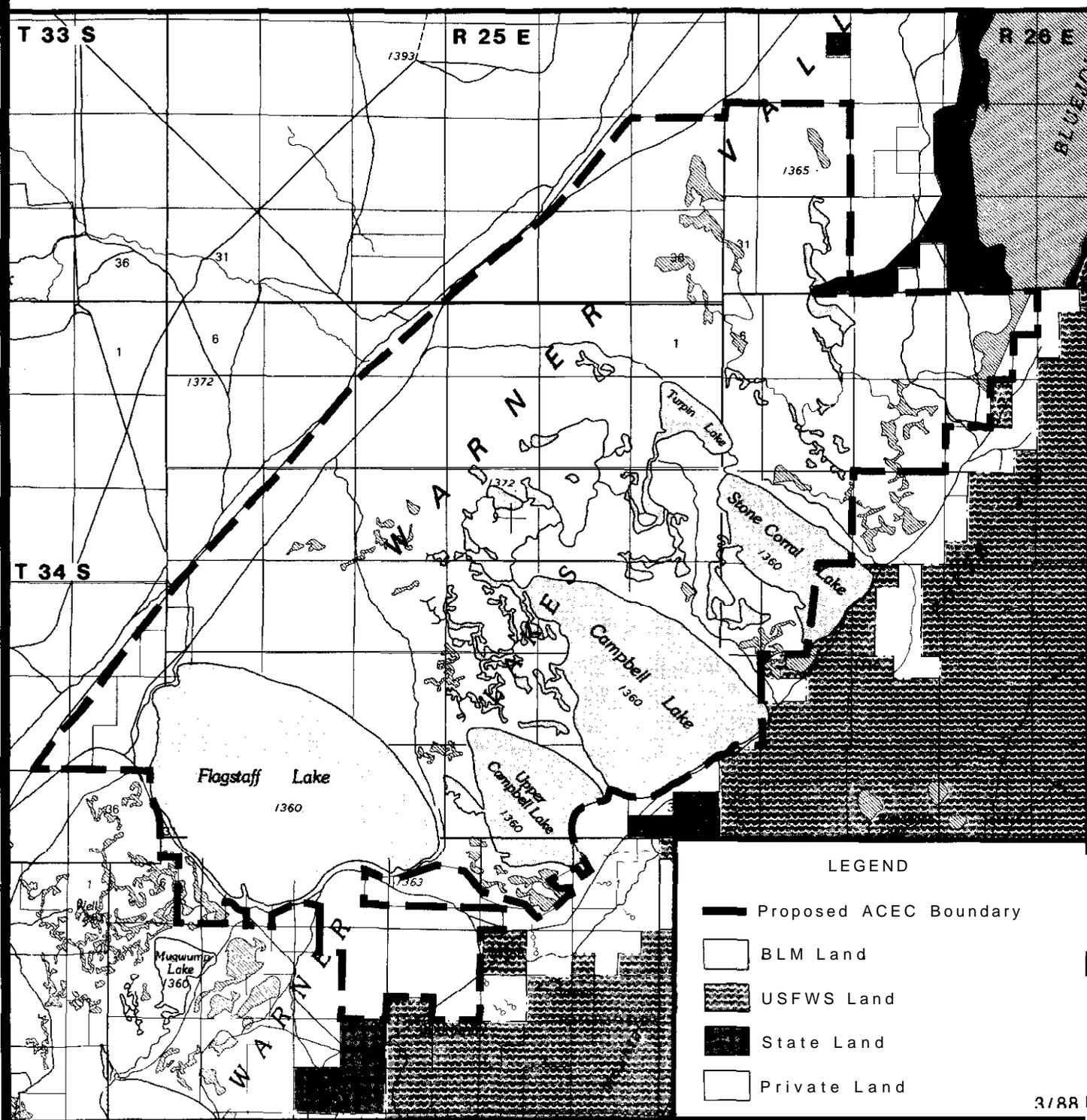
March 1988

WARNER LAKES RESOURCE AREA
Proposed Warner Lakes ACEC



MAP 5

Scale 1" = 1.6 Miles



Allotment 501 Flynn (portion)

The portion of this allotment within the wetlands planning area will be managed under guidelines in Alternative 1.

Allotment 502 Fitzgerald (portion)

That portion of the allotment within the wetlands planning area will be managed under the guidelines in Alternative 4, with additional designation as an Area of Critical Environmental Concern (ACEC) as addressed in Alternative 5.

Allotment 504 Kiely

This allotment will be managed under the guidelines in Alternative 3.

Allotment 507 Laird

A portion of this allotment will be managed under Alternatives 4 and 5 as a portion of an ACEC. The remaining portion of the allotment adjacent to Bluejoint Lake will be managed under the guidelines in Alternative 1. The discontinuous portion of the allotment near Mugwump and Swamp Lakes will be managed under the guidelines in Alternative 4 (see map 4).

Allotment 512 North Bluejoint (portion)

The portion of the allotment within the wetlands planning area will be managed under the guidelines in Alternative 1.

Allotment 523 Warner Lakes

This allotment will be managed under the guidelines in Alternative 4. In addition, a portion of the allotment will receive ACEC designation as described in Alternative 5.

Unallotted Parcels

All parcels within the wetlands planning area currently unallotted for livestock grazing will be managed under the guidelines of Alternative 4.

Acquired Lands

Wetlands acquired in the planning area will be managed under Alternative 2 or 4 to maximize benefits to wildlife and recreation. Uplands acquired in the planning area will be managed under Alternative 2, 3, or 4.

Chapter 3 Affected Environment

The environment of the Warner Valley is characterized by broad fluctuations in temperature, precipitation, and water levels. Seasonal temperatures range from one hundred degrees Fahrenheit to twenty degrees below zero. Annual precipitation can vary from six to twenty inches.

The Warner Lakes are in a closed basin system with no outflow. Within this system the lakes routinely follow a filling cycle and then go through a long period of drying through evaporation or absorption. From the perspective of geologic time, the entire basin was a large lake during Pleistocene times some 10,000 years ago. Lake levels are now receding from historical highs which occurred in 1983-84. Long-term historic records show that all of the valley's lakes have completely dried at least three times since the 1860's.

Vegetal Communities

The vegetal communities of Warner Valley were investigated under a National Science Foundation Grant (Gilman, et al, 1978) to Oregon State University, and a more detailed investigation specific to the public lands in Warner Valley was conducted by Bureau personnel (Devaurs, et al, 1987, unpubl rpt). The following list constitutes the fifteen principal plant communities that could be affected by actions resulting from implementation of the amendment.

Upland Associations

1. Big sagebrush-Black greasewood
2. Black greasewood-Shadscale saltbrush/Alkali saltgrass-Basin wildrye
3. Black greasewood-Shadscale saltbrush-Big sagebrush/Alkali saltgrass
4. Black greasewood/Alkali saltgrass
5. Black greasewood/Alkali saltgrass-Nuttall alkaligrass-Creeping wildrye
6. Alkali saltgrass

Wetland Associations

The following group of plant communities form a highly complex, often intergrading, mosaic on the permanently moist to saturated soils at the edges of the sloughs, channels, ponds and marshes. Many of the environmental factors and micro-habit determinants for specific community dominance on a given site have not been determined as yet. They do, however, in a natural state, have a commonality in being able to migrate remarkable distances year to year in response to fluctuating water levels. Which, in large part, leads to the nearly un-mappable complexity of the associations (i.e., last years water edge community may be several feet above or below this years waterline-with resultant partial replacement of unadaptable community components).

7. Alkali saltgrass — Baltic rush
8. Alkali saltgrass-Borax weed-Nuttall's alkaligrass
9. Creeping wildrye -Alkali saltgrass
10. Creeping wildrye — Baltic rush -Seaside arrowgrass
12. Baltic rush-common silverweed — Creeping spike-rush
13. Baltic rush-Nevada bluegrass
14. Creeping spike-rush-Narrowleaf water plantain
15. Creeping spike-rush-Baltic rush-sedge

In addition to the above listed communities scattered throughout the study area on suitable habitats, several small (0.1 to 0.5 acre) single-species emergent communities were located. These include Hardstem bulrush, Burrreed, Alkali bulrush, Narrow-leaf cattail and Broad-leaf cattail.

Systematic sampling of the aquatic plant communities **was** not attempted; the following species were identified: Pondweeds (*Potamogeton natans* and *pectinatus*), Duckweeds (*Lemna* and *Spirodella*) Waterweed (*Elodea* sp.) and Wigeongrass (*Ruppia* sp.)

See Appendix I for a listing of the plants and their scientific names and a description of principle communities.

Ecological Relationships

The plant community present on a given site at any point in time is a direct reflection of all environmental factors affecting that site. Within the planning area, the principal factors are: soil productivity, past soil disturbances (fire, farming, draining, etc.), and the original plant community upon which these factors operated. Little information is available on this last factor.

Within the upland communities, the data presented shows a low percentage of native forbs and grasses present and elevated percentages of invader and exotic species. This is inferred from generally available data sources (Soil Conservation Service Handbooks, plant ecology texts, comparison areas, etc.). District records, such as trend studies, past inventories and range surveys indicate that the species composition and frequency of the plant communities have changed little in the past twenty to thirty years. Locations with similar soils, precipitation, and vegetation within the planning area have been excluded from livestock grazing and a progression towards the expected site potential climax community has been observed. This leads to the conclusion that the communities being grazed are a stable, grazing induced disclimax.

This static disclimax situation is not the case for the wetland associated communities. These communities have evolved under a set of environmental parameters (long term soil saturation, little root aeration, only occasional moisture stress, etc.) that severely limits the number and types of plants able to invade when the community is placed under stress. The usual community response to that stress is an overall decrease in community size. When a community can no longer maintain itself on a site because of some limiting factor, it minimizes its occupancy area, retreating to the favorable portion of its habitat where survival is most likely.

An additional factor occurring in the area is the punching of soils by livestock, creating small hummocks or mounds on the surface of the wet soils. These become small pockets or microhabitats which are more easily colonized by invader and exotic species.

The high moisture and nutritional content **resulting** in lush plant growth in the wetlands, when compared to the much less palatable conditions on the uplands, concentrates very heavy livestock use to wetlands. This **further** increases the pressure on the community, as the same amount of livestock use is occurring on a constantly decreasing forage base.

Wildlife Habitats

Wetlands Habitats

The wetlands habitat condition on public lands in Warner Valley was inventoried in 1967 (Devaurs, op cit), using the vertical structure and density of the vegetation as the prime indicators of condition. Presented below, and summarized in Tables II, and III are the results of that inventory.

Allotment 205 Greaser Drift (Portion of allotment)

The portion of this allotment being considered are those public lands lying west of, or below, Blizzard Gap. Most wetlands in this portion of the allotment are currently being managed for wildlife habitat through the exclusion and/or restriction of livestock grazing. Prior to initiating habitat enhancement work (1981 – 1985), the wetlands here were in uniformly poor condition. Current (1987) habitat conditions are: 40% good, 33% fair, and 27% poor.

Allotment 212 Rahilly-Gravelly (portion)

Only that portion of the allotment containing Coleman Lake and associated wetlands is being considered here. Coleman Lake is an alkaline, ephemeral playa of negligible current of potential habitat value. The associated wetlands of Fosken and Dace Springs are being managed through livestock exclusion as critical habitat for the federally listed threatened species, the Fosken Springs Speckled Dace. From a uniformly poor condition habitat in 1980, these wetlands have improved to 67% good condition, 24% fair condition, and 9% poor condition through livestock exclusion and management.

Allotment 219 Cahill

This small, custodial management allotment contains some potentially very productive wetlands. Their current ratings are 57% good condition, 14% fair, and 29% poor.

Table II: Public land wetland types in Warner Valley by Allotment

Allotment NO.	Allotment Name	Acres of Wetland Type			Other	Total Wetlands
		Lacustrine	Emergent	Scrub/Shrub		
205	Greaser (part)	1,119	1,077	0	28	2,224
212	Rahilly (part)	1,575	20	0	0	1,595
219	Cahill	0	249	8	0	257
222	Fisher Lake	60	169	34	3	266
501	Flynn -(part)	0	18	0	0	18
502	Fitzgerald (part)	0	202	0	0	202
504	Kiely	0	8	0	2	10
507	Laird	0	638	0	0	638
512	N. Bluejoint	0	289	8	2	299
523	Warner Lakes	3,515	7,905	18	600	12,038
Unallotted — Hart Lake		8	27	0	0	35
Unallotted — Crump Lake		182	110	0	0	292
Unallotted — Mugwump Lake		0	44	0	0	44
Unallotted -Anderson Lake		0	27	0	0	27
Unallotted — Greaser		0	59	0	0	59
		6,459	10,842	68	635	18,004

Table III: Public Land Wetland Habitat Condition in Warner Valley by Allotment

Allotment NO.	Allotment Name	Acres of Condition Class			Unsampled	Total Acres
		Poor	Fair	Good		
205	Greaser (part)	597	742	665	0	2,224
212	Rahilly (part)	11	29	81	1,474 *	1,595
219	Cahill	74	37	146	0	257
222	Fisher Lake	77	77	112	0	266
501	Flynn (part)	0	0	18	0	18
502	Fitzgerald (part)	0	0	202	0	202
504	Kiely	10	0	0	0	10
507	Laird	297	65	42	214	638
512	N. Bluejoint	239	60	0	0	299
523	Warner Lakes	9,484	1,778	593	183	12,038
Unallotted	Hart Lake	0	17	10	8	35
Unallotted	Crump Lake	5	20	5	182	292
Unallotted	Mugwump Lake	44	0	0	0	44
Unallotted	Anderson Lake	27	0	0	0	27
Unallotted	Greaser	59	0	0	0	59
		10,924	2,645	2,174	2,061	18,004

* Ephemeral alkali playa of Coleman Lake

Allotment 222 Fisher Lake

The wetlands of this allotment were inventoried with the following results: 42% good condition, 29% fair, and 29% poor. Approximately two-thirds of the good condition habitat is inside an enclosure built in 1961 to restrict livestock use.

Allotment 501 Flynn (portion)

Only that portion of the allotment bordering the Narrows between Grump and Hart Lakes is being considered. This small (16 acres) strip of highly productive wetlands is in uniformly good condition.

Allotment 502 Fitzgerald (portion)

The portion of this allotment being considered is a small pasture on the south shore of Upper Campbell lake. containing 202 acres of very productive emergent wetland. Current habitat ratings are of uniformly good condition, primarily because recent high water levels have precluded livestock use of the wetlands.

Allotment 504 Kiely

A small, ten acre parcel of wetlands associated with Hart Lake lies inside this allotment. Current habitat conditions are of a uniformly poor condition, primarily reflecting the amount of vegetation removed by livestock.

Allotment 507 Laird

This fragmented allotment contains wetlands associated with Bluejoint, Mugwump and Swamp Lakes. Current condition ratings are: 10% good, 20% fair, and 70% poor.

Allotment 512 North Bluejoint

The allotment is located at the northern, or lower end of the Warner Valley basin, and contains wetlands of marginal productive potential. Major water level fluctuations, even during wet cycle years, appear more limiting to productivity than current land use practices. Current habitat conditions are: 0% good, 20% fair, and 60% poor.

Allotment 523 Warner Lakes

This allotment, also known as the Warner Potholes, contains the largest single block (11,655 acres) of BLM administered public

wetlands in Oregon. Current inventories rate these wetlands as being in 80% poor condition, 15% fair condition, and 5% good condition—primarily because of vegetation removal by authorized livestock use. Those areas rating in good and high fair condition have an average waterfowl nesting density of 4.1 nests/mile of shoreline. The remaining habitat has an average density of 1.5 nests/mile of shoreline. Current waterfowl production levels are estimated at 1,366 ducks produced per year. In addition to their value as production habitat, the aquatic beds of pondweeds and wigeongrass in the larger lakes and ponds provide feeding grounds for tens of thousands of migrating waterfowl and water birds.

Unallotted -Hart Lake, Crump Lake, Mugwump and Swamp Lakes, Greaser Reservoir

While unallotted for livestock grazing, these wetlands are being grazed. Habitat conditions vary from poor to good, depending on the amount of unauthorized livestock grazing. (see grazing discussion)

Upland Habitats

While no inventory of habitat conditions specific to upland habitats was conducted, much inferential data can be drawn from the two studies previously cited (Devaurs, et al., and Gilman, et al). In terms of species composition, both studies indicated a very impoverished upland flora, with little more present than a shrub canopy over a lower story of annuals. Native perennial forbs are almost totally absent from most communities, and exotic invader species (cheatgrass brome, tansy-mustard, pepperweed, etc.) form a significant to dominating percentage of the non-shrubby species present. This lack of species diversity is one factor indicating poor condition habitat.

Another, and related factor, is a lack of structural diversity in the vegetal community, with a consequent scarcity of spatial niches in the habitat. It is basic to ecological inter-relationships, that the less diverse a plant community is floristically and structurally, the less abundant and diverse will be the wildlife community using that habitat. For a variety of reasons dealing with past land-use practices, the upland communities of the planning area have lost much of their diversity and structure. Consequently, they have lost much of their productivity as wildlife habitats. While agreeing that minor exceptions exist, the overall upland habitat conditions are

rated at poor to low fair throughout the planning area.

Wildlife Populations

The wetland/upland mosaic of habitats within the planning area has created a complex interplay of resident, breeding and migratory wildlife populations. A listing of species identified can be obtained in the Lakeview District Office.

Resident Populations

The resident mammalian population is a rather typical Great Basin association of species. Coyotes, badgers and bobcats fill the top-carnivore niche, followed by red fox, raccoon, skunks and weasels. Various rabbits, hares, ground squirrels, mice, voles and kangaroo rats provide the primary prey base. Beavers and muskrats can be found in most of the aquatic habitats, with the latter being far more common. Pronghorn antelope and bighorn sheep make sparse and Occasional use of the area. as do both resident and migrant mule deer.

The resident avifauna is associated primarily with upland habitats, and varies somewhat with the severity of winter weather. Quail, chukar, pheasants, flickers, robins, mountain bluebirds. Townsend's solitaire, golden eagle and prairie falcon are commonly seen year-round. During milder winters, mourning dove, kestrel and several species of blackbirds and sparrows remain.

Migratory Populations

Migrating flocks of waterfowl, shorebirds and other water-related species numbering in the tens of thousands, comprise the most visible element of the migratory population. Nearly any species of this type occurring in the western U.S. has been observed at one time or another in the planning area.

Less noticeable are smaller flocks of various sparrows, warblers and flycatchers passing through to montane habitats on nearby National Forest and Wildlife Refuge lands.

Breeding Populations

Beyond those species identified as resident, a large number of species migrate into Warner Valley to use the available breeding habitats. Approximately one hundred bird species are known to breed in the planning area: Waterfowl-14 species; shorebirds and gulls-15 species; grebes, herons, cranes, etc.-18 species; raptors-9 species; passerines-44 species.

Endangered, Threatened and Sensitive Species

Pregrine Falcon (Endangered)

This species is occasionally seen in Warner Valley during the spring and fall waterfowl migrations (district files). Inventories were conducted to locate any nesting birds in the valley, and to assess the potential for reintroduction (Boyce and White, 1982). No eyries were found and subsequent work (Devaurs and Munhall, 1983. unpubl. rpt.) indicated that pesticide loading of prey species was still high enough to preclude re-establishing a population. Natural or artificial reintroductions, however, are still a possibility.

Bald Eagle (Threatened)

A variable population of 5 to 20 adult and juvenile bald eagles has been observed in Warner Valley during the fall and winter. Their primary diet appears to be crippled waterfowl, road-side carrion, and dead livestock. While no bald eagles are known to have nested in the planning area, three nest sites have been documented (district files) in the valley: a cliff nest on Fish Creek Rim, another cliff nest at the mouth of Deep Creek Canyon, and a

third atop a beaver lodge in the Honey Creek marshes.

Warner Sucker (Threatened)

This species, endemic to Warner Valley, has been found at various times (Gilman, op cit; Coombs and Bond, 1979 & 1980; Swenson, 1978; district files) in most aquatic habitats of the planning area except Coleman Valley. Two miles of channels immediately north of the Hart Lake bar have been designated as critical habitat.

Foskett Springs Speckled Dace (Threatened)

This species is known only from Foskett and Dace springs on the shore of Coleman Lake. Coordinated with the U.S. Fish and Wildlife Service under provisions of the Endangered Species Act, these habitats are currently protected.

Sensitive Species

No legal definition or current Oregon listing of sensitive species exists. For this amendment, those species identified by the U.S. Fish and Wildlife Service as candidates for listing (Federal Register Vol. 50. No. 181) are considered sensitive.

White-faced Ibis

A breeding population (15-20) of this species exists on private lands within the planning area. Individuals and small groups of ibis have been reported feeding at several locations on public lands.

Western Snowy Plover

Migratory use throughout Warner Valley has been observed, with a small (35 pair) breeding population intermittently using Coleman Lake.

Long-billed Curlew

Small breeding populations exist at various locations throughout Warner Valley. Although strongly suspected, none have yet been located within the planning area.

Sensitive Plant Species

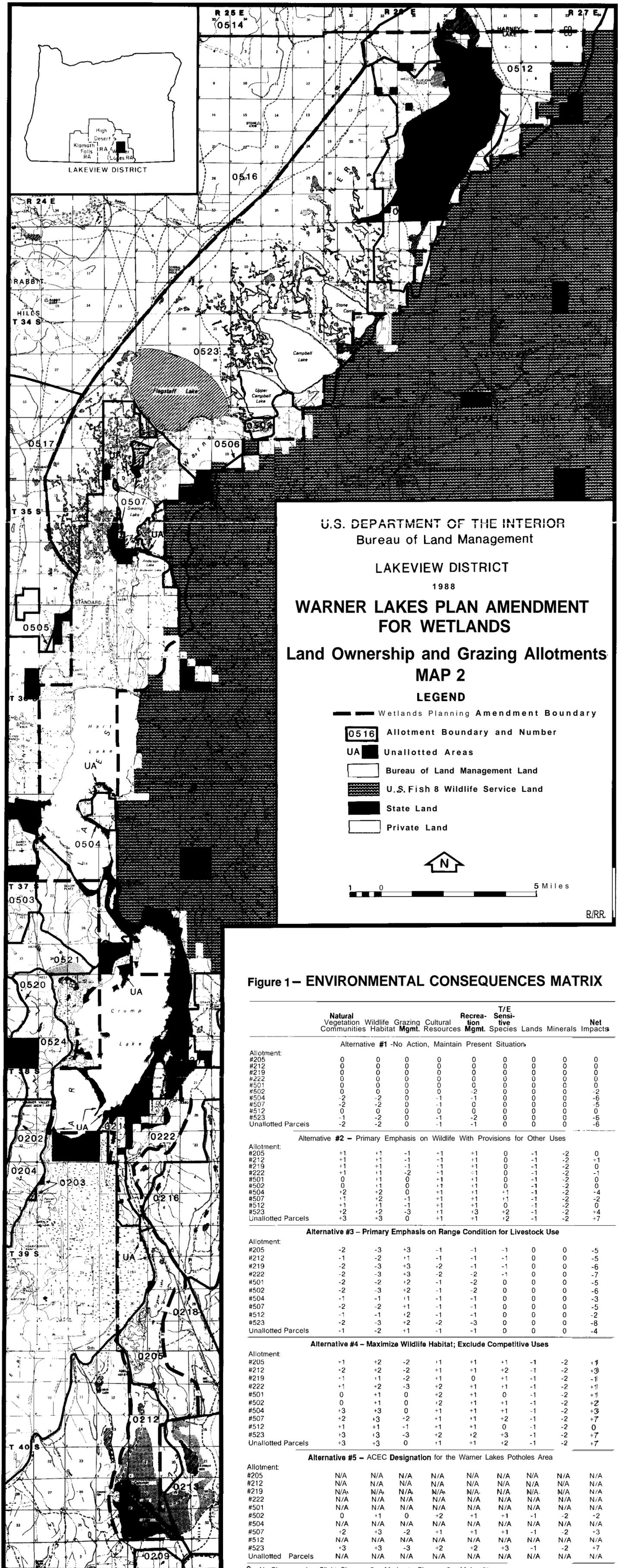
Although there have been sensitive plant species reported as being within the planning area, a botanical survey conducted on public lands failed to confirm their occurrence.

Cultural Resources

The Warner Valley area has had several archaeological projects completed dealing with the location and evaluation of sites in the valley. This research has shown that the area has been occupied for at least 10,000 years. The area contains numerous sites spread over a wide variety of ecosystems. Site types found here include: rock art, lithic workshops, lithic scatters, small temporary campsites, semi-permanent villages, burials, hunting blinds, stone walls and structures, plant gathering and processing sites.

The Northern Paiute Indians are known to have occupied the valley at the time of white contact. There is still use being made of the area by the Paiute. Uses include hunting, plant gathering and visiting of graves and religious sites.

The most recent work in the area was that of the University of Nevada (Reno, Nevada). During the summer of 1987, they conducted investigations into the prehistory of the proposed ACEC area. They completed survey work to identify new sites and describe the condition and content of the surface sites as well as sub-surface testing to determine the density and sub-surface content of sites. The work indicated a large amount of cultural material is present in the valley. It revealed an impressive number and variety of artifacts spanning at least 10,000 years of occupation. The sites provided charcoal for dating. It revealed a heavy reliance on the aquatic resources of the area, most interesting being the use of mussels.



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

LAKEVIEW DISTRICT
 1988
WARNER LAKES PLAN AMENDMENT
FOR WETLANDS
Land Ownership and Grazing Allotments
MAP 2
LEGEND

- Wetlands Planning Amendment Boundary
- Allotment Boundary and Number
- Unallotted Areas
- Bureau of Land Management Land
- U.S. Fish & Wildlife Service Land
- State Land
- Private Land

1 0 5 Miles

R/RR.

Figure 1 – ENVIRONMENTAL CONSEQUENCES MATRIX

	Natural Vegetation Communities	Wildlife Habitat	Grazing Mgmt.	Cultural Resources	Recreation Mgmt.	T/E Sensitive Species	Lands	Minerals	Net Impacts
Alternative #1 - No Action, Maintain Present Situation									
Allotment:									
#205	0	0	0	0	0	0	0	0	0
#212	0	0	0	0	0	0	0	0	0
#219	0	0	0	0	0	0	0	0	0
#222	0	0	0	0	0	0	0	0	0
#501	0	0	0	0	0	0	0	0	0
#502	0	0	0	0	-2	0	0	0	-2
#504	-2	-2	0	-1	-1	0	0	0	-6
#507	-2	-2	0	-1	0	0	0	0	-5
#512	0	0	0	0	0	0	0	0	0
#523	-1	-2	0	-1	-2	0	0	0	-6
Unallotted Parcels	-2	-2	0	-1	-1	0	0	0	-6
Alternative #2 - Primary Emphasis on Wildlife With Provisions for Other Uses									
Allotment:									
#205	+1	+1	-1	+1	+1	0	-1	-2	0
#212	+1	+1	-1	-1	+1	0	-1	-2	-1
#219	+1	+1	-1	-1	+1	0	-1	-2	0
#222	+1	+1	-2	-1	-1	0	-1	-2	-1
#501	0	+1	0	+1	+1	0	-1	-2	0
#502	0	+1	0	+1	+1	0	-1	-2	0
#504	+2	+2	0	+1	+1	+1	-1	-2	-4
#507	+1	+2	-1	+1	+1	+1	-1	-2	-2
#512	+1	+1	-1	+1	+1	0	-1	-2	0
#523	+2	+2	-3	+1	+1	+1	-1	-2	+4
Unallotted Parcels	+3	+3	0	+1	+3	+2	-1	-2	+7
Alternative #3 - Primary Emphasis on Range Condition for Livestock Use									
Allotment:									
#205	-2	-3	+3	-1	-1	-1	0	0	-5
#212	-1	-2	+1	-1	-1	-1	0	0	-5
#219	-2	-3	+3	-2	-1	-1	0	0	-6
#222	-2	-3	+3	-2	-2	-1	0	0	-7
#501	-2	-2	+2	-1	-2	0	0	0	-5
#502	-2	-3	+2	-1	-2	0	0	0	-6
#504	-1	-1	+1	-1	-1	0	0	0	-3
#507	-2	-2	+1	-1	-1	0	0	0	-5
#512	-1	-1	+2	-1	-1	0	0	0	-2
#523	-2	-3	+2	-2	-3	0	0	0	-8
Unallotted Parcels	-1	-2	+1	-1	-1	0	0	0	-4
Alternative #4 - Maximize Wildlife Habitat; Exclude Competitive Uses									
Allotment:									
#205	-1	+2	-2	+1	+1	+1	-1	-2	+1
#212	-2	+2	-2	+1	+1	+2	-1	-2	+3
#219	-1	+1	-2	+1	0	+1	-1	-2	-1
#222	+1	+2	-3	+2	+1	+1	-1	-2	+1
#501	0	+1	0	+2	+1	0	-1	-2	+1
#502	0	+1	0	+2	+1	+1	-1	-2	+2
#504	+3	+3	0	+1	+1	+1	-1	-2	+3
#507	+2	+3	-2	+1	+1	+2	-1	-2	+7
#512	+1	+1	-1	+1	+1	0	-1	-2	0
#523	+3	+3	-3	+2	+2	+3	-1	-2	+7
Unallotted Parcels	+3	+3	0	+1	+1	+2	-1	-2	+7
Alternative #5 - ACEC Designation for the Warner Lakes Potholes Area									
Allotment:									
#205	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#212	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#219	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#222	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#501	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#502	0	+1	0	+2	+1	+1	-1	-2	-2
#504	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#507	-2	+3	-2	+1	+1	+1	-1	-2	+3
#512	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
#523	+3	+3	-3	+2	+2	+3	-1	-2	+7
Unallotted Parcels	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

0 = No Change, 1 = Slight Change, 2 = Moderate Change, 3 = Major Change

Historic dune activity has contributed to building the leeward side of the lakeshore dune masses. Many of the pre-historic and historic sites exist in these areas where a sediment source is readily available, wind velocities are high, and sites are probably buried by recent dune-forming processes.

The recent studies revealed that erosion of sites by wind and water, as well as damage by collectors and livestock, are causing major site disturbance in the wetlands planning area.

Livestock Grazing

The planning area encompasses all of part of ten grazing allotments. The allotments are all cow/calf operations with cattle supported on private, state or other federal lands when off Bureau administered rangelands. The best available data on the range condition for the allotments as presented in the Lakeview Grazing EIS (1980), is listed in Table IV. This table show 91% of the planning area is in poor condition, 7% fair condition, 1% good condition and 1% unsurveyed. The present livestock grazing situation is depicted in Table V. This table outlines current season of use, active preference in each allotment, active preference within the planning area for the total allotment, suspended non-use for the portion of the allotment, and suspended non-use by allotment within the planning area. Pertinent activities within each of the ten allotments are:

Allotment 205 Greaser Drift (Portion)

This allotment has cattle trailed through it in the spring and then drifted through in the fall of the year. The private base property is contiguous to the allotment. No administration problems exist in the allotment. The current range condition is 100% poor.

Allotment 212 Rahilly–Gravelly (Portion)

The portion of the allotment which is within the amendment area is a spring turnout pasture of cattle. The allotment has been under a deferred grazing system for the last thirteen years. The base property is adjacent to the allotment. All pastures within the allotment are fenced with no existing administration problems. The existing range condition is 10% good, 19% fair, 67% poor, and 4% unsurveyed.

Allotment 219 Cahill

This is a small fenced range federal allotment. Cattle graze the area in the fall and winter. There are problems with existing fences due to ice shearing, fluctuating water levels, and lack of maintenance. This could result in livestock drift out of the

allotment into adjacent areas. The land status within the allotment consists of public, state, and private lands. The entire allotment is in fair range condition.

Allotment 222 Fisher Lake

The Fisher Lake allotment is under a winter use grazing system. Approximately two thirds of the wetland habitat in this allotment is already within a wetland management pasture. All of the pastures within the allotment are fenced. There are minor fence maintenance problems due to fluctuating water levels. The existing range condition is 70% fair and 30% poor.

Allotment 501 Flynn (Portion)

This is a fenced range federal allotment. it is a very small allotment in size, and the area being considered makes up on 1% of the total acreage (18 acres) of the allotment. There are no existing administrative problems. The entire allotment is in good condition.

Allotment 502 Fitzgerald (Portion)

This is a fenced range federal allotment. The area being considered makes up only 4% of the total acreage (202 acres) of the allotment. it is used for a very short period of time in the spring. There are no existing administrative problems. The entire allotment is in fair range condition.

Allotment 504 Kiely

This is a fenced range federal allotment. It is very small in size (390 acres). It is used for a very short period of time in the winter. There are no existing administrative problems. The entire allotment is in fair range condition.

Allotment 507 Laird

This is a fenced range federal allotment. it is very small in size and fragmented with areas associated with Bluejoint, Mugwump, and Swamp Lakes. The existing range condition is 74% poor, with 26% of the allotment unsurveyed.

Allotment 512 North Bluejoint

The current season of use for this allotment is spring/summer. The base property is contiguous to the allotment. Administration of this allotment is complex due to the intermingled state lands. There are existing problems with fluctuating water levels which cause fence maintenance problems. Livestock drift occurs out of

Table IV: Range Condition for Grazing Allotments **within** the Planning Area

Allotment #and Name	Acres of Public Land		Range Condition			
	Total Allotment	Planning Area	Good	Fair	Poor	Unknown
205 Greaser Drift	9,210	3,284	0	832	3,284	0
212 Rahilly-Gravelly	33,285	4,420	416		3,172	0
219 Cahill	470	470	0	470	0	0
222 Fisher Lake	4,230	1,430	0	997	433	0
501 Flynn	2,780	195	195	0	0	0
502 Fitzgerald	5,150	285	0	285	0	0
504 Kiely	390	390	0	390	0	0
507 Laird	2,030	2,030	0	0	1,568	462
512 North Bluejoint	22,440	6,180	0	0	6,180	0
523 Warner Lakes	39,653	39,653	0	1,270	38,383	0
		58,337	611 (1%)	4,244 (7%)	53,020 (91%)	462 (1%)

Table V: Grazing Use and Preference

	Licensed Use Period	Active Preference		Suspended Preference	
		Total	Allot.	Total	Allot.
205	Greaser	9/1-11/15	306	73	0
212	Rahilly-Gravelly	3/15-9/15	1,761	67	0
219	Cahill	Yearlong	260	260	0
222	Fisher Lake	11/15-3/15	529	366	0
501	Flynn	Yearlong	120	6	134
502	Fitzgerald	Yearlong	346	17	0
504	Kiely	Yearlong	23	23	0
507	Laird	Yearlong	164	164	0
512	N. Bluejoint	10/1-12/31	289	80	79
523	Warner Lakes	4/16-I O/I 5	1,656	1,656	17
	Total		5,394	2,752	604

the allotment due to a lack of fencing on the west boundary. The entire allotment is in poor range condition.

Allotment 523 Warner Lakes

This is a common allotment used by four permittees. The season of use is from April 1 -October 15, with the majority of use occurring after July 15 of each year. The allotment provides spring/summer forage important to the current permittees operations. The base properties are contiguous to the allotment.

Administration of this allotment is complex. There are existing problems with fencing due to fluctuating water levels and a resultant difficulty in maintaining fences. There is a documented problem with unauthorized livestock use. The existing range condition is 3% fair and 97% poor.

Unallotted-Crump Lake, Mugwump, and Swamp Lakes, and Greaser Reservoir

These are parcels of public land which are not designated within an allotment and are intermingled with private and state leased lands. The areas are very difficult to administer under the existing situation. There is evidence of livestock use being made on these parcels. There is currently no permit issued for livestock grazing.

Recreation

The Warner Valley has long been a focal point for diverse recreational opportunities including hunting, fishing, sight-seeing, bird watching, boating and camping. The mixed private, state and federal land ownership, coupled with poorly defined property boundaries, makes it difficult to quantify user numbers on any specific parcel of public land. However, all or part of each recreation visit used some portion of public land.

Data gathered during the spring and early summer of 1967 showed as many as 300 people per day were fishing for crappie from Anderson Lake north. This use was predominately by Lake County residents. Interviews disclosed that users were also coming from Idaho, central California, the Portland metropolitan area and the Willamette Valley. The annual total of this use is estimated at between six and seven thousand user days for fishing. This use is causing a developing problem with sanitation and visitor management on private lands on the east side of the lakes, as well as impacting public lands.

Limited hunter counts were made during the 1986 and 1987 waterfowl hunting seasons. The counts have shown that on opening day the area draws as many as 360 hunters. Another forty hunters were counted on the Greaser portion of the planning area. Field interviews indicate that almost half of the users come from the Willamette Valley. Fifteen percent of users come from

California, another fifteen percent from northeast Oregon, and the remainder come from a widely dispersed base. Visitors from Idaho, central California, and southern Washington demonstrate the regional significance of the area. The total public land waterfowl hunting use is estimated to be five to six thousand visits annually. An additional 250-300 user days are estimated or upland bird hunting (California quail and chukar).

The diverse avifauna has long drawn bird watching enthusiasts to the Warner Valley. during 1967, organized bird watching tours of the Potholes were sponsored by several colleges and universities, and various Audubon Society Chapters. Annual visitation is estimated between eight hundred and one thousand user days for birdwatching.

The scenic quality of the entire planning area is high, bordered by the sheer fault scarps of Hart Mountain and Fish Creek Rim and further enhanced by the lakes, ponds, channels and sloughs of the area's wetlands. As the area is located along the entry route to the Hart Mountain National Antelope Refuge, the scenic quality of the area is important to many of the 29,000 plus visitors to the refuge annually. Visual resource management (VRM) criteria place the area in Class II, which means that management activities should not be evident in the characteristic landscape. Contrasts are seen, but must not attract attention.

Much of the planning area was evaluated in the Wilderness Inventory for Oregon, with the final decision issued November, 1960. This decision did not recommend the area for further study. Poker Jim Rim, immediately to the east on USFWS lands, has been administratively endorsed for wilderness. Fish Creek Rim, a BLM WSA to the west has been recommended in the Oregon Wilderness EIS as suitable in part for designation as wilderness.

Lands and Minerals

Wetland areas generally cannot be disposed of due to Executive Order 11990 constraints.

There are no substantial mineral values for rock, sand, or gravel in the wetlands areas. The uplands have a low to moderate potential for these types of mineral materials. There are currently no mining claims in the planning area.

Warner Valley is considered to be prospectively valuable for sodium, oil and gas, and geothermal resources. That portion of the valley lying south of the north end of Crump Lake is classified as a Known Geothermal Resource Area (KGRA). There are no active leases in the planning area at the current time.

Listed below are the lands and minerals case file notations specific to the public lands in the planning area:

T.36 S., R. 24E.

Sec. 22 and 27: OR 3569, irrigation facility; OR 24443, buried

telephone cable; OR 02062, powerline; OR 26697, County Road 3-10 along west side of Warner Valley.

Sections 13,22-27 incl., 36; KGRA (Known Geothermal Resource Area)

T. 40S., Ft. 24 E.
Sections 1, 12, 13, 24, 25; KGRA

T. 35 S., R. 25 E.
Section 9: NW1/4SW1/4; authorized gravel pit

T. 38 S., R. 25 E.
Section 29; Public Water Reserve Withdrawal

Sections 5-8 incl., 17-20 incl., 26-32 incl.; KGRA

T. 39 S., R. 25 E.
Section 20 and 21: OR 010564: State highway ROW and material site

Sections 6, 7, 17-21 incl., 29-31 incl.: KGRA

County roads **authorized** under **RS** 2477 also exist in the following areas:

1. Across Warner Valley between Mugwump and Flagstaff Lakes (County road 3-11).
2. Across Warner Valley or the north end of Hart Lake, and **up** the east side of the valley (County Road 3-12).
3. Along the west side of Coleman Valley (County Road 3-15).

Chapter 4 Environmental Consequences

impacts to Livestock Grazing

The environmental consequences for each of the six alternatives to livestock grazing within the wetland amendment area are as follows:

Alternative No. 1: No action, Maintain Present Situation

The present livestock grazing situation and management would remain in effect with no impact to active grazing preference. Existing enclosures currently being managed for **wildlife** habitat would continue to be managed in this fashion as addressed in the preferred alternative section.

Alternative No. 2: Primary Emphasis on Wildlife with Provisions for Other Uses

The condition of the wildlife habitats present is the principal management concern of this alternative. Condition is a direct function of the height and density of the remaining herbaceous vegetation (residual cover) for use by nesting waterfowl after livestock grazing. There are two basic strategies for livestock grazing to reach the stated habitat **objectives**: (1) A single pasture system where livestock are removed when utilization reaches critical levels, or (2) a multi-pasture, rest-rotation system in which **some** pastures would exceed, others meet, and **some** fail to meet the residual cover requirements in any given year. The impacts of the two alternatives systems are:

(1) Single Pasture Systems: The primary impact would be reduced levels of allowable livestock utilization compared to present use. To achieve good condition **habitat**, livestock would have to be removed when a stubble height of 3 decimeters

(approximately 12 inches) of residual cover is reached. This would require a reduction in licensed **AUM's** estimated at 50 to 75 percent of current use. The differing **palatabilities** of the wetland and upland species, along **with** the physical configuration of the wetlands (long, narrow borders along the meandering sloughs and channels) would lead to heavy concentrations of livestock use in the wetlands. This could cause the critical stubble height to be reached in wetland areas long before the uplands, producing a further reduction in allowable use as a consequence. Constant and intensive monitoring of the utilization levels would be required.

Because of differing total annual **herbaceous** production, based primarily on precipitation and **soil** moisture, **permitted** would not know from year to year what their licensed levels of use would be.

(2) Multi-pasture rest-rotation systems: The primary impacts are again associated with an **initial** reduction in licensed use necessary to implement a grazing system in which one or more pastures of an allotment are not used each year. Without balancing the stocking rates to the vegetative production of the use pastures, heavy overgrazing and site **degradation** could occur. The exact reduction in **AUM's** licensed would depend upon the specific system adapted, but could be expected to be in the 50.75% range.

Either permanent or temporary electric fencing needed to implement such a system would be difficult and expensive to build and maintain within the complex mosaic of sloughs, channels, potholes and lakes. Major problems have been experienced in maintaining the limited fencing currently in use in the area. This problem would be expected to increase as the amount of required fencing to implement the grazing system increases.

Alternative No. 3: Primary Emphasis on Range Condition for Livestock Use

The emphasis is on increased livestock forage production, while maintaining, or improving, the present vegetative communities through the use of a grazing system.

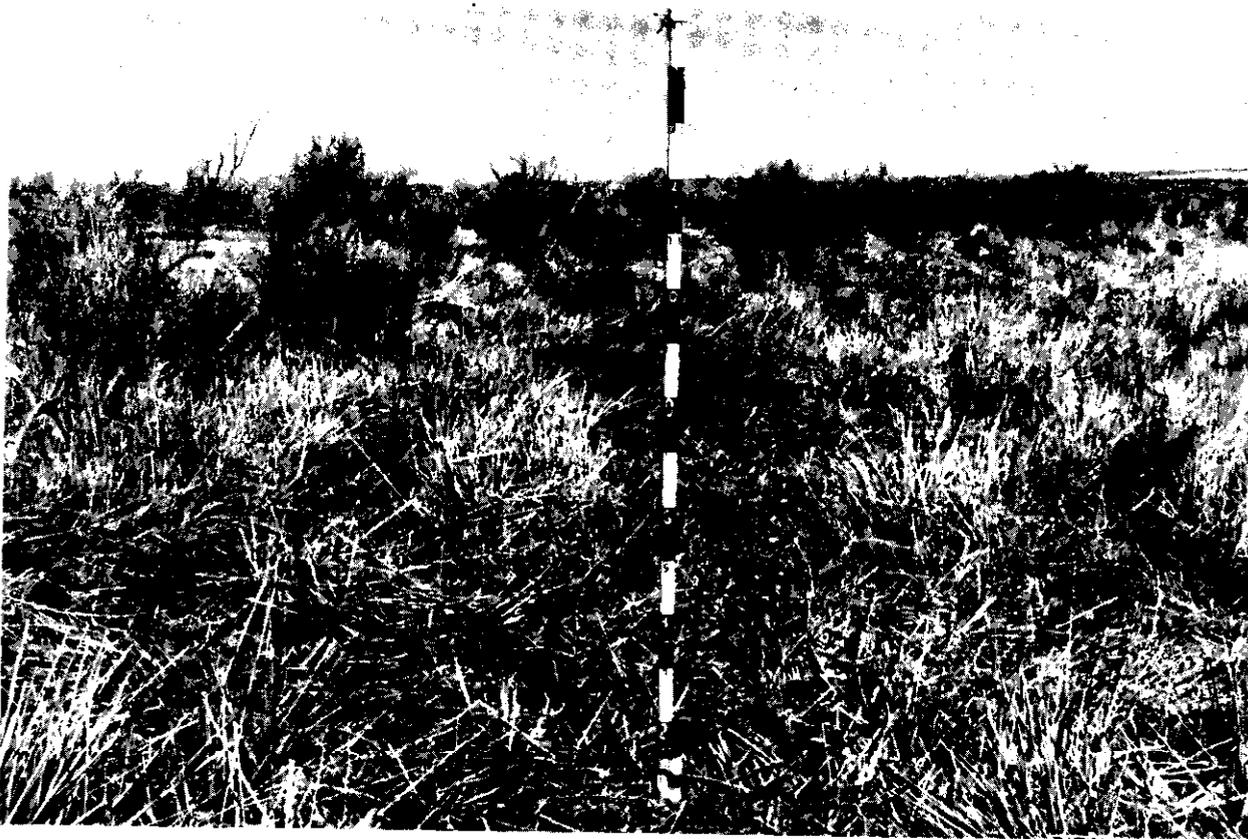
Through the use of grazing systems within the specific wetland areas, the physiological needs of the vegetative communities could be met. This would require implementing appropriate range improvement facilities to accomplish the identified management objectives within each allotment. Specific actions would be described in allotment management plans (AMP's) to be developed for each specific grazing allotment. The net anticipated result of this alternative would be a slight increase in authorized use on allotments 212,504 and 507. Moderate increases would occur in allotments 501,502, 512, and 523. Major increased would occur in allotments 205,210 and 222.

The major increases identified above are associated with allotments which currently have livestock enclosures. Under this alternative these enclosures would **be** made available to livestock grazing within the existing **and/or** a developed grazing system; therefore making additional forage available. The **unallotted** areas which include Hart, **Crump**, Mugwump, Anderson and Greaser would be administered as fenced range federal allotments and authorized for grazing use which would provide for a slight increase in available livestock forage.

The present vegetative communities within the wetland areas will need special management consideration to improve in condition.



Good condition nesting habitat with 7.5 decimeter 100% visual obscurity (BLM photo).



Poor condition nesting habitat with 0.5 decimeter 100% visual obscurity (BLM photo).

Management specific to wetlands is necessary, separate from uplands. because *livestock tend* to concentrate on the more productive, green, succulent, and high palatable wetland forage compared to the relatively unpalatable upland forage. This may require separate pastures with management tied to key emergent species. Details of such a management scheme could be detailed in an AMP.

The upland communities would also benefit through the use of a grazing system developed to provide for an upward trend in vegetative community.

Alternative No. 4: Maximize Wildlife Habitat; Exclude Other Conflicting Uses

This alternative requires total exclusion of any livestock grazing within the wetland amendment area. This would result in a direct decrease in active preference for the existing livestock permittees.

The removal of livestock grazing will eliminate grazing as a management tool for rejuvenation of vegetation. There are other means with which to manipulate the vegetation such as burning or mowing.

This alternative would lead to a slight loss of active preference to users overall operations in allotments 205, 212, 219, and 512. There would be a moderate loss in allotment 507 and a major loss to users of allotments 222 and 523.

Alternative No. 5: ACEC Designation for the Warner Lakes Pothole Area

ACEC designation calls for livestock removal and duplicates the impacts analyzed under Alternative No. 4. The area within the ACEC boundary is described on map 5.

Alternative No. 6: Preferred Alternative by Allotment

Allotment 205 -Greaser Drift (portion)

This alternative is a combination of Alternative No. 1, and Alternative No. 4. The present livestock grazing situation will remain the same with no change to the active grazing preference. Existing **enclosures** would continue to exclude **livestock** grazing.

Allotment 212 — Rahilly-Gravelly (portion)

This allotment follows Alternative 1, the no action Alternative, which will have no impact to the present livestock grazing situation.

Allotment 219 -Cahill

This allotment will be managed under Alternative No. 2. It is anticipated that no change would occur from the present livestock grazing situation. Any change would be evaluated based on meeting the wildlife management objectives of this Alternative.

Allotment 222 — Fisher Lake

The preferred Alternative is a combination of Alternatives No. 1 and 4. Livestock active preference would remain unchanged. Existing **enclosures** will be maintained to exclude livestock.

Allotment 501 -Flynn (portion)

The portion of the allotment within the wetland planning area will be managed under Alternative No. 1. No change from present situation.

Allotment 502 — Fitzgerald

The preferred Alternative for this allotment is Alternatives No. 4 and 5. Management would exclude livestock grazing with a loss of **seventeen** AUM's of active preference.

Allotment 504 — Kiely

The preferred Alternative selected for this allotment is Alternative No. 3. Management will be directed to increase livestock forage production while maintaining or improving the condition of the vegetative communities. The livestock operation could receive a slight increase in active **preference** if additional forage becomes available through future management.

Allotment 507 — Laird

The preferred Alternative for this allotment is a combination of Alternatives 1.4. and 5 (see map 4). The northern area adjacent to **Bluejoint** Lake will continue the present livestock operation and situation. The southern portion of the allotment will exclude livestock grazing. Areas near Mugwump and Swamp Lakes will also exclude livestock grazing. The livestock operation will lose 73 AUM's of active preference. **A fence** would need to be constructed at the south end of Blue Joint Lake to implement management **objectives**. There would be an expected moderate upward trend in vegetative communities.

Allotment 512 — North Bluejoint

The existing situation will remain with no change to the livestock operation.

Allotment 523 -Warner Lakes

The preferred Alternative selected for this allotment is a combination of Alternatives No. 4 and 5 excluding livestock grazing from the allotment. This a major change to the four current livestock **permittees** with a loss of 1656AUM's of active preference. (see Table VII Present Livestock Grazing Situation). Current use provides high quality summer forage for livestock. Under this Alternative as discussed in mitigation, livestock grazing could be affected by a change of area of use, season of use and forage type available to the permittee.

Unallotted Parcels

Under Alternative 4, no grazing would be authorized on these parcels. Livestock grazing is not currently authorized in these areas, therefore no impact to livestock grazing would occur. An upward trend in vegetative condition would be anticipated.

Mitigating Measures

The preferred Alternative would result in a loss of active preference for three allotments (502, 507, and 523). Mitigation offered to offset the loss of these AUM's is:

Allotment 502 -Fitzgerald

Seventeen (17) AUM's of active preference will be offered within the Big Rock Seeding of the Coyote **Colvin** Allotment #517. The Coyote **Colvin** Allotment is part of the affected permittees existing operation. Use would be temporary non-renewable until Bureau monitoring studies determine forage availability on a permanent basis.

Allotment 507 — Laird

Seventy three AUM's of active preference would be offered within areas where additional forage is available or where there are new range developments. The use would be made under the existing season of use and present management. The authorization would be temporary nonrenewable until Bureau monitoring studies determine forage availability on a permanent basis.

Allotment 523 -Warner Lakes

Sixteen hundred and fifty six AUM's of active preference would be offered in areas where additional forage is available or where there are new range developments. The authorized use would be under the existing season of use and current management for the allotment. The authorization would be on a temporary non-renewable basis until Bureau monitoring studies determine forage availability for active preference.

Impacts to Wildlife Habitat and Populations

Alternative No. 1: No Action

Under this Alternative the wildlife habitat condition described in the affected environment would remain essentially unchanged at: 61% poor, 16% fair, 12% good, and 11% unsampled. The wildlife populations should remain static in the planning area.

Alternatives No. 2: Primary Emphasis on Wildlife with Provisions for Other Uses

As discussed in the Livestock Grazing impacts section, two management strategies are available to attain objectives; single pasture with predetermined utilization levels, or multi-pasture rest-rotation systems. Even though wildlife habitat condition is used to set management direction, there would still be unmitigated impacts to wildlife habitat and populations under these grazing systems.

Single pasture systems: Unless a season of use is established that permits livestock grazing only after waterfowl nesting has been completed (July 15-August 15), serious destruction and/or abandonment of nests due to trampling and disturbance would be expected. The selective grazing of shoreline and in-shore emergent communities will further impact the nesting populations by removing or severely limiting the extent and quality of brood rearing habitats. Even with later season grazing, over-water nesting species, such as canvasbacks and redheads, would still be precluded from nesting by a lack of habitat. These species require tall, dense stands of emergent vegetation of a height well in excess of the residual cover height (3dm) considered good condition habitat for ground nesting species. A later summer season of use that would limit trampling and disturbance of ground nests would increase impacts to over-water nests by concentrating livestock use even more along the shorelines and shallows. This concentration is a function of the dry and relatively unpalatable condition of upland forage in August, compared to the green, succulent, and highly palatable wetland forage.

Multi-pasture rest-rotation systems: To achieve the cover height and density required for good condition nesting habitat, the minimum usable grazing system would be one of 4 pastures, where only 2 are used per year. Several variations of the four pasture theme were reviewed for impacts. Rotation through these variations would allow one growing season's residual cover to be available for nesting on 25.50% of the allotment annually. Twenty five to 50% of the allotment would be heavily grazed and generally unavailable for nesting habitat. A larger number of pastures could be used, but the basic principle of the rotation system would remain the same.

An additional, if unquantifiable impact would be associated with nesting area fidelity, or the tendency of waterfowl to return for nesting to the same locale at which they were reared or had previously nested. This tendency varies in intensity between species as well as between individuals of the same species. It is a real and powerful factor in an area's attractiveness to nesting

waterfowl. Constantly moving the available habitat within which nesting is expected to occur could have impacts on early nest site selection, re-nesting attempts, brood survival, or the number of non-nesting adults present. The magnitude and final significance of those impacts are not presently quantifiable.

As with the single pasture systems, any multi-pasture system will likely preclude nesting by over-water species, due to a reduced amount of dense, ungrazed emergent stands of bulrush or cattails. The more intensive the grazing system, the greater the likelihood of livestock concentrating on shoreline and shallow water emergent communities.

Alternative No. 3: Primary Emphasis on Range Condition for Livestock Use

Under this alternative both the total extent and the overall condition of the wildlife habitats would decline. Livestock concentrations along the narrow bands of wetland habitats would severely degrade their structure and useability as nesting habitat. The upland habitats would show similar, if less severe declines. Near total elimination of waterfowl and waterbird nesting populations could be expected, as would also be the case for upland species requiring any kind of ground cover or structural diversity. The range improvements allowed under this alternative (seedings, brush control, pipelines, etc.) would increase the rate of habitat degradation over that possible with livestock alone.

Alternative No. 4: Maximize Wildlife Habitat; Exclude Other Conflicting Uses

This Alternative would provide major beneficial changes in productivity for both wetland and upland habitats. Within six years of implementation, it is estimated that habitat condition would improve from 12% good condition to approximately 70% good condition. Present nesting populations could be expected to at least double during this same period. Species presently precluded by a lack of diversity and structure or livestock disturbance (herons, egrets, ibis, sandhill cranes, etc.) could be expected to begin nesting in the improved habitats. The acres of usable nesting habitat would greatly increase as shoreline communities would retain the vegetative structure currently consumed by livestock. Shoreline communities are dominated by highly rhizomatous species, therefore, expansion could double or triple the acres of emergent and shoreline habitats. Even during the short dry periods, the improved habitat structure and diversity brought about by livestock removal will increase the richness or diversity of non-wetland related species.

Alternative No. 5: ACEC Designation

In the area designated ACEC, the same net impacts as for Alternative 4 would occur.

Alternative No. 6: Preferred Alternative by Allotment

Allotment 205 -Greaser Drift (portion)

The preferred Alternative combines Alternatives 1 and 4, and would affect no change. The highly productive wetlands present (approximately 1,900 acres) would remain excluded from livestock use. Those wetlands remaining open to grazing (approximately 300 acres) are in a severe draw-down zone of Greaser Reservoir with low potential to provide nesting habitat.

The upward trend in wetland habitat condition, 0% good (1962) to 40% good (1967) is expected to continue and should approach 60% good condition by 1993. A similar upward trend in the numbers and species diversity of nesting waterfowl/water birds has been observed and should continue. This trend will likely accelerate as the willow thickets protected in 1961 begin to provide vertical structure to the habitats.

Allotment 212 — Rahilly-Gravelly (portion)

The no action Alternative will not change the wildlife habitats present as the majority of the highly productive emergent wetlands at Foskett and Dace Springs would remain excluded from livestock grazing. The habitat trend from 0% good condition in 1960, to 67% good condition in 1967, should continue.

Wetlands open to grazing are within the ephemeral alkali **playa** of Coleman Lake and have little habitat potential other than limited resting and feeding habitat when water is present. There should be no substantive changes in wildlife populations.

Allotment 219 -Cahill

Alternative 2 will result in a slight improvement in habitat condition, population density and diversity, as the majority of the allotment's wetlands are already in good condition. Slight modification of existing practices could result in less than 10% of the wetlands remaining in poor and low fair condition by 1993. Further improvement is limited by site potential.

Allotment 222 — Fisher Lake (portion)

Management on this allotment would combine Alternatives 1 & 4. This represents no change from the present situation. The high potential wetlands are excluded from livestock use, improving greatly in habitat condition since 1961. This upward trend is expected to continue. Slower improvement throughout the allotment is expected under the existing grazing system. Wildlife populations should show no major changes beyond those already observed in the excluded areas.

Allotment 501 -Flynn (portion)

No change to existing management or condition.

Allotment 502 — Fitzgerald

Alternative 4 and 5 will result in only slight improvements **over** existing good wildlife habitat and population conditions on this allotment. These wetlands remain physically and ecologically integral to the Warner Potholes wetlands complex. The physical barrier to livestock created by high water levels since 1963 has led to the good condition habitats. Removal of this barrier without management constraints would add to habitat degradation due to removal of cover and vegetation by livestock.

Allotment 504 — Kiely

Slight decline in quality would occur to wildlife habitats and populations under Alternative 3, due to the limited acreage and low potential of the habitat present. Past site degradation severely limits their potential for improvement.

Allotment 507 — Laird

A combination of three alternatives (No.'s 1,4, and 5) as selected for this highly fragmented allotment. For the low potential, alkaline, draw-down **zone** of the northern three quarters of Bluejoint Lake, no action change would lead to static environmental conditions. Little improvement could be expected under any alternative.

The remaining **portion** of the allotment would be managed under Alternatives 4 and 5. Major improvement to **both** wildlife habitat condition and populations are anticipated. **Inventory** data indicates that habitat condition would improve from the current 0% good to 60% good within six years of implementation approaching 60% good condition within twelve years. Similar magnitude beneficial impacts to nesting populations are expected, especially for overwater nesting species requiring sturdy, emergent stands of

bulrush and cattails (canvasbacks, redheads, grebes, coots, etc.).

Allotment 512 -North Bluejoint (portion)

The no action Alternative will lead to static habitat condition and wildlife populations. Extreme water fluctuations and soil alkalinity severely limit the productive potential of the 299 acres of wetlands in this allotment.

Allotment 523 -Warner Lakes

Intensive inventories conducted in 1967, indicate that adoption of the preferred Alternatives (No's 4 and 5) would result in major beneficial impacts to wetland habitat condition. From the present 5% good condition, an increase to 67% good condition is expected within six years. This improvement would be from approximately 600 acres in good condition to nearly 6,100 acres. Poor condition habitats would decrease from 6,100 acres to 1,300 acres within six years of implementation. This would place nearly 60% of the allotments wetlands in the high fair to good condition habitat range preferred by nesting waterfowl.

This habitat condition improvement would result in a major improvement in the density and numbers of nesting **waterfowl** and other water-related species. Current nesting densities **over** most of the allotment were found to be 1.5 waterfowl nest per mile of shoreline. Under the preferred Alternative, this would improve to 4.1 nests/mile within six years, but lack of a comparison area makes the extent of this additional change unquantifiable.

Another major **benefit** expected is an increase in the survival rates of the broods produced. Elimination of the direct nest losses due to livestocktrampling, coupled with the indirect nest losses to predators caused by **cover** removal will increase the number of successful nests. The survival rate of the young coming from these nests will also be increased by having higher quality brooding, feeding, and escape **cover** present. The shallow water emergent plant communities favored by livestock are also critical to early survival of young broods. Aseventy-five percent increase in brood **survival** rates (four young per brood currently to seven young **per** brood in six years) is expected as a result of undisturbed plant growth.

The preferred **Alternative** would increase the species diversity of the breeding populations present. Current practices totally preclude over-water nesting species, such as canvasbacks and redheads, because emergent vegetation is removed. Species requiring heavy ground cover for nesting (north harrier, **short**-eared owls, etc.), are severely limited, as are species requiring a clumping of vertical **structure** for nesting substrates (herons, egrets, etc.). Major improvement of the first two habitat deficiencies could be expected short-term upon implementation, and of the third **over** a longer period.

Unallotted Parcels

Elimination of unauthorized livestock grazing from the **unallotted** parcels under the preferred alternative (no. 4), will result in improvements to habitat condition. Because of their high potential, these wetlands are largely in good condition (50%). Within six years the **poor** condition areas (12%) and the fair condition areas should be in good condition.

Impacts to Threatened, Endangered and Sensitive Species

Except as noted for the allotments below, the impacts of the preferred alternatives upon threatened, endangered and sensitive species would be inconsequential or highly conjectural.

Allotments 205, 212, 219, and 222

Slight to moderate improvements **over** existing conditions are anticipated for these allotments, primarily due to habitat protection and enhancement work already completed. The species **benefit**-

ting include two federally listed threatened species (Warner Sucker, Foskett Springs speckled daze), and four sensitive species (long-billed curlew, western snowy plover, greater sandhill crane, white-faced ibis). These beneficial impacts are associated with the improved **quality** and quantity of breeding, rearing, and feeding **habitats** evidenced to date and projected for the future.

Allotments 502,507, and 523

The allotments should show the same types of improvement for the same species as discussed above. Habitat improvements envisioned over the broad expanse of the Warner Potholes should produce major improvements in populations densities and composition. Increased and more diverse prey populations should also make the reintroductions of peregrine falcons (federal endangered) into historical habitats much more viable.

Impacts to Vegetal Communities

Introduction

Fifteen major native vegetal communities are identified in the affected environment. Six communities can be characterized as being predominately upland types, **with** the remaining nine wetlands associated. These two broad categories will generally serve for vegetal community analysis.

Alternative No. 1

No substantive change in the **composition** and density of the upland **communities** is expected. The environmental factors, dominated by livestock grazing, responsible for the current low percentages of native grass and **forb** species, and the elevated percentages of invader and exotic species would remain. The decline in the size and integrity of the wetland communities will continue.

Alternative No. 2

Either the single or multiple-pasture grazing systems would lead to major improvements in the composition and density of the vegetal communities. Both systems would tend to push the ecological succession to a higher, **or more** near climax, seral stage than is presently the case. Over time, invader and exotic species will be reduced **or** eliminated from the communities. Plant vigor will increase, and the native perennial associations could be expected to expand over sites now dominated by annuals and exotics. Where succession would again stop in a grazing **discli-**max is not known, but it would be much closer to the site potential than is currently possible. This upward successional trend **could** be expected on both the upland and wetland communities.

Alternative No. 3

A range of impacts, depending **upon** the species by which range condition is measured, and the amount of vegetation manipulation done, would **result** from this Alternative. Range (or forage) condition has little relationship to ecological (or seral) stage condition, except that the forage species managed will determine the seral stage of the entire community. Management for high seral species, such as basin **wildrye**, Indian **receggrass** or tufted hairgrass, will require the entire community to be maintained in a high seral stage. However, lower **sero** forage species, such as bottlebrush squirreltail, Nevada bluegrass or cheatgrass **brome**, would require a consequent lowering of seral stage. When the **sero** is lowered, an increasing number of perennial grass and forb species will be eliminated from the community. Entire wetland plant communities could be eliminated under sustained heavy use. Range forage seedings will also result in the complete and immediate loss of native plant communities.

Alternative No. 4

Without livestock grazing, the vegetal communities would be trending toward or achieving site potential climax **conditions** within 10 years. The speed with which climax is reached will be a function of how far below potential each community **has** been degraded. A slower response time would be expected in the upland communities. The plant density, species **composition**, and species diversity will increase in varying amounts as the higher seral stages are reached. This will lead to a resultant decline in exotic, invader and annual species. The overall complexity, and natural stability of the communities will increase, becoming **more** pronounced as site potential climax is neared.

Alternative No. 5

The impacts would not differ substantially from those of No. 4 above.

Alternative No. 6: Preferred Alternative by Allotment

Remaining Allotments end Unallotted Parcels

The impacts to the vegetal communities within an allotment would be as discussed for the particular alternative selected for that allotment. The selected alternatives by allotment are:

Allotment 219 — **Alternative 2**

Allotment 501 and 512 -Alternative 3

Allotment **504** — **Alternative 3**

Allotment 503 and 523 -Alternatives 4 & 5

Allotment 507 -Alternative 1 in the northern area adjacent to Bluejoint Lake. Alternative 4 and 5 in the area adjacent to Stone Corral Lake and **Alternative 4** in the Mugwump and Swamp Lake areas. **Unallotted** parcels will be managed under **alternative 4**.

Impacts to Cultural Resources

Alternative 1 would lead to a slight continuing impact to archaeological resources through trampling by livestock and continued ease of access to **site** locations by collectors as vegetative and soils cover would be removed through the effects of continued livestock grazing practices.

Alternative 2 would offer increased vegetation retention and protection of artifacts and sites as a result of soil stability and the masking effect of vegetation.

Alternative 3 would lead to increased removal of vegetation and disturbance of the area by livestock developments being constructed such as seedings, fencelines and water developments. These factors could lead to increased impacts to soil cover resulting in increased damage potential to sites and surface artifacts as well as sub-surface deposits.

Alternative 4 would remove livestock from the area and provide protection of vegetation and increased growth as well as stability of soils in the area. This would provide protection from trampling to both surface and sub-surface deposits and result in slight to moderate improvements in all allotments within the planning area for the preservation of archaeological **and paleontologic resources. This factor is especially important on shoreline areas where vegetation retention will help stop edge erosion of the lakeshore.**

Alternative 5 would add the designation of ACEC (Allotment 523 and immediate surrounds) to the positive benefits of Alternative 4, calling for protective measures for all natural resources beyond measures stipulated in Alternative 4. This designation would also focus management attention on the area and require public involvement in the management process if any measures are



Typical potholes and channels adjacent to the Warner Lakes (photo by G. Baetjer).

proposed that might alter the management direction in the land use plan. The ACEC designation also focuses National attention on the area as opposed to the limited nature of local concerns.

Impacts to Recreation

Alternative 1 would continue a downward trend in recreation activity quality in the areas surrounding the lakes in Allotment 523, 502 and 504. Increased levels of use are leading to sanitation problems on public and private lands and access denial to the public across private parcels is probable in the near future due to lack of authority to control visitor use within the mired land pattern. Easement acquisitions and/or cooperative management agreement with private landowners are unsupported in the current land use plan due to the lack of clear objectives and guidance to accommodate full management of the resource.

Alternatives 2 and 4 offer viable solutions to the recreation use problems in the area by making easement acquisition cooperative agreements possible in a workable fashion. These alternatives also offer the opportunity to block recreation lands through acquisition from willing sellers via exchange or purchase. The direct environmental effect would result from ELM management capability to install visitor use facilities, control access and sanitation problems, provide information, and other aspects leading to protection of the biological, physical, and social resources available in the area. The control of physical damage to vegetation, soils, and waters in the area would lead to aesthetic as well as physical improvements in the environment. Plan implementation and subsequent habitat management plans would include off-road vehicle restrictions affecting vehicle-oriented recreation. As use is generally peripheral and some

developments are projected to better manage recreation use, this is a minor constraint.

Alternative 3 would provide controls of the factors mentioned for Alternatives 2 & 4, however this Alternative also calls for more intensive management of livestock which would alter vegetation, add control structures and artificial environmental components such as seedings, and alter the semi-primitive motorized aspects of recreation use in the area. Projects allowable under this Alternative could also alter the visual representation of the area and reduce waterfowl populations and diversity as addressed in the wildlife section. This alteration of condition would reduce the value of the area for birdwatching, and waterfowl hunting opportunities.

Alternative 5 would offer the protective aspects of Alternative 4, but ACEC designation and the following implementation plan for ACEC management could lead to constraints to development of recreation enhancement facilities to a minor extent. Resource protection developments, i.e. toilets, signs, etc, would not be affected by designation however. The semi-primitive recreation opportunities would be enhanced with the designation and offer a broader spectrum of input for the public in management activities.

Impacts to Lands and Minerals

Alternatives 1 & 3

These Alternatives would have no impact upon the lands or minerals programs.

Alternatives 2 & 4

These Alternatives would preclude land disposal, granting of rights-of-ways for roads, pipelines and **powerlines**, mineral material sales, and surface occupancy for mineral leasing operations within wetland areas. The impact upon the land disposal and right-of-way programs would be slight as it is unlikely that there would be much demand for FLPMA road and pipeline rights-of-way **across** the affected lands based on the lack of historical demand.

Impacts to possible future mineral lessees **could** be moderate as they would not be allowed surface occupancy on wetland areas. Some adjacent upland areas could also be inaccessible to the lessee. Given the lack of historical development and scattered nature of the wetlands which would have no surface occupancy stipulated in leases, this is not a significant constraint.

Impacts to mineral disposals in wetlands would be slight. Historical demand for these materials within the wetland areas has been low. **If** mineral leasing, exploration and development, were to take place, however, mineral materials would be in demand for road and drill pad construction and unavailable.

Alternative 4 states that any operations having a cumulative net negative impact on the wildlife habitat of the upland or wetland areas would **be** prohibited. This could have a moderate prohibitive impact upon mineral material disposal, as most **deposits** are located in the uplands. This element could also preclude **rights-of-way**, land disposal, and mineral leasing on uplands as well as wetlands if there is found to be a cumulative impact to wildlife resources.

Alternative 5

ACEC designation would have little direct impact upon the lands program. The demand for new roads and other rights-of-way in this area is low. Mineral leasing activities would be moderately impacted by an ACEC management plan that would implement the designation. Access would be limited by the "use of existing roads and ways only" requirement, and new road construction would be prohibited. Associated pipelines and powerlines **necessary for development** of the resource would also be restricted or prohibited. Impacts upon mineral material sales and mining would be slight.

Economics

An economic assessment was discussed concerning the values of livestock and wildlife. Since there are proposed mitigations to offset the proposed AUM reductions, the team concluded that an analysis was not necessary.

Chapter 5 List of Preparers

Name	Primary Responsibility	Discipline
Bill Cannon	ACEC, Cultural	Archaeology
Ralph Culbertson	Team Leader	Multiple Resources
Wail Devours	Wildlife, Vegetation	Wildlife Biology
Vicky Modrell	Typesetting, Layout	Visual Information Specialist
Alan Munhall	Soils, Water Wildlife	Wildlife Biology
Clint Oke	Range	Range Management
Dennis Simontacchi	Lands, Minerals	Geology
Doug Troutman	Recreation/Editor	Environmental
	NEPA Compliance	Coord.

Chapter 6 List of Agencies, Organizations and Persons to Whom Copies of This Document Are Sent

Approximately 600 copies of this Plan **Amendment/EA** are sent to the various publics listed below:

Local News Media
Local, State, and National Public Representatives
Wilderness Interest Groups
Environmental Interest Groups
Wildlife Interest Groups
Recreation Interest Groups
Grazing Permittees in the Warner Lakes Resource Area

Governmental Agencies

Intergovernmental Relations,
Oregon State Clearinghouse
Oregon Division of State Lands
Lake County Planning Department
Oregon Department of Fish and Wildlife
U.S. Fish and Wildlife Service
Environmental Protection Agency

Groups Formally Contacted

Malheur National Wildlife Refuge
Oregon **Department of** Fish and Wildlife
Oregon Natural Resources Council
Lakeview BLM District Advisory Council
Paiute Tribal Committee

In addition, this document will be available for public inspection at all BLM offices in Oregon. **It** will also be sent to the Lake County Library in Lakeview, Oregon, and the Klamath County Library in Klamath Falls, Oregon.

Glossary

Active Preference — Portion of the grazing preference that is available for use. Active preference combined with suspended non-use equals **total** preference.

Allotment -An area of land designated and managed for grazing of livestock.

Allotment Management Plan (AMP) — A documented program which applies to livestock grazing on the public lands, prepared in consultation, cooperation and coordination with the **permittee(s)** or lessee(s) or other involved affected interests.

Animal Unit Month (AUM)— The amount of forage necessary for the sustenance of one cow or its equivalent for a period of one month.

Association — (as plant or **vegetal** association) -A major unit in ecological community organization characterized by essential uniformity and usually by two or more dominant species

Authorized Use-The total number of animal unit months of livestock authorized by permit or license to graze on public lands for each permittee.

Base Property-Land that has the capability to produce crops or forage that can be used to support authorized livestock for a specified period of the year.

Class of Livestock -Age and/or sex groups of a kind of livestock.

Climax -A relatively stable stage or community, especially of plants, that is achieved through successful adjustment to an environment.

Common Allotment — A grazing allotment which is used by more than one permittee.

Community — (as a plant community) -An interacting population of various species in a common location.

Condition, ecological-a subjective rating system assigning a qualitative (good, fair, poor) rating to a site or community based on how closely that site or community approaches or fails to approach site potential climax.

Condition, habitat-a subjective rating system assigning a qualitative (good, fair, poor) rating to a site based on the amount of residual cover providing 100% visual obscurity for nesting waterfowl in the spring.

Condition, range-a subjective rating system assigning a qualitative (good, fair, poor) rating to a site based on that site's forage production, potential for forage production, and suitability for grazing.

Disclimax -A relatively stable ecological community often including kinds of organisms foreign to the region and displacing the climax because of disturbance, especially by man.

Deferred Grazing -Postponement of grazing for a stated period of time.

Emergent Communities-Plant communities characterized by species rooted in soils usually submerged by water, with vegetative and/or reproductive plant parts growing through the water into the air. Examples: cattails, bulrush, bur-reed.

Exotic Species-Non-native species, introduced into a community by some direct or indirect human action. Examples: cheatgrass brome, tumble mustard, Russian knapweed.

Fenced Range Federal-Generally an isolated tract of federal land surrounded by fenced private lands and therefore detached from other federal lands for access and management purposes.

Forage -All browse and herbaceous foods that are available to grazing animals.

Grazing Preference-The total number of animal unit months of livestock grazing on public lands apportioned and attached to base properly owned or controlled by a permittee or lessee.

Grazing System -A systematic sequence of grazing treatments applied to an allotment to reach identified multiple-use goals or objectives by improving the quality and quantity of the vegetation.

Invader Species — Native species colonizing a disturbed community of which they are not a natural component.

Licensed Use -Active use **AUM's** that a permittee has paid for during a given grazing period.

Livestock or Kind of Livestock -Species of domestic livestock — **cattle**, sheep, horses, burros and goats.

Livestock Grazing Capacity -The estimated number of animal unit months of forage available for livestock grazing on a sustained yield basis.

Monitoring -The orderly collection of data to evaluate (1) Effects of management actions; and (2) Effectiveness of actions in meeting management objectives.

Multiple Use-The management of public lands and their various resource values so that they are utilized in a combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into **account** the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit **output**.

One-hundred Percent Visual Obscurity-The height at which all **portions** of a reference or measuring rod (**Robel Pole**) is totally hidden by vegetation. usually measured in decimeters.

Permittee — One who holds a permit to graze livestock on public lands.

Public lands -Any land and interest in land outside of Alaska owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management, except lands held for the benefit of Indians.

Range Site — A distinctive kind of rangeland that differs from other kinds in its ability to produce a characteristic natural plant community.

Seral Stage — One of a series of biotic communities that follow one another in time on any given area. Ser.4 community is synonymous with seral stage, successional community, and successional stage.

Site Potential Climax Community — That climax community which could develop in a specific area under existing natural ecological parameters; i.e. without direct or indirect human disturbance.

Structural Diversity — Differing spatial elements or components of a community aligned vertically.

Succession -The orderly process of community change; it is the sequence of communities which replace one another in a given area.

Temporary Nonrenewal License -Authorization for forage which is temporarily available, above active preference, on an allotment basis. Use is authorized provided it is consistent with multiple use objectives for the allotment.

Trailing -Moving livestock from one destination to another on public lands within a specific time frame.

Utilization -The proportion or degree of current years forage or browse production that is consumed or destroyed by animals (including insects). May refer either to a single plant species, a group of species, or to the vegetation as a whole. Utilization is synonymous with use.

Vegetation — Plants in general, or the sum total of the plant life above and below ground in an area.

Vegetation community- A plant community with distinguishable characteristics.

Vegetation Manipulation —Alteration of vegetation by fire, mechanical, chemical or biological means to meet management objectives.

Vigor-Relates to the relative robustness of a plant in comparison to other individuals of the same species. It is reflected primarily by the size of a plant and its parts in relation to its age and the environment in which it is growing.

Appendix 1 Principal Plant Communities

The following discussion is a description of the fifteen principle plant communities that could be affected. It is descriptive of the communities present at the time of sampling without consideration of ecological interrelationships and progressions.

1. Big sagebrush-Black greasewood

This community is located on pediments and terraces having soils of the Loftus Series. The terrain is gently hilly and the soil surface is dry and covered with numerous small rocks. The major components of this community and the constancy (% frequency) of their occurrence in sample plots are as follows: Big sagebrush (17%), Black greasewood (9%), Gray rabbitbrush (3%), Shadscale saltbush (1%), Bottlebrush squirreltail (2%), Cheatgrass brome (36%), Claspings pepperweed (15%), Tansymustard (11%), Pahute weed (2%).

2. Black greasewood-Shadscale saltbush/Alkali saltgrass-Basin wildrye

This community covers the higher ground surrounding internally drained basins and playas. Soils are of the Loftus Series, with nearly level to slightly rolling topography and a dry, slightly cracked ground surface. The major components and sample plot constancy (0% frequency) are as follows: Black greasewood (95%), Shadscale saltbush (15%), Big sagebrush (7%), Green rabbitbrush (4%), Alkali saltgrass (33%), Basin wildrye (13%), Bottlebrush squirreltail (24%), Cheatgrass brome (17%), Claspings pepperweed (44%), and Tansymustard (11%).

3. Black greasewood-Shadscale saltbush-Big sagebrush/Alkali saltgrass

This community was also found on the high ground surrounding internally drained basins and playas. Soils are of the Loftus Series, with numerous small and large surface rocks and a gently rolling terrain. The major components and sample plot constancy (% frequency) are as follows: Black greasewood (15%), Shadscale saltbush (13%), Big sagebrush (9%), Gray rabbitbrush (10%), Alkali saltgrass (28%), Bottlebrush squirreltail (14%), cheatgrass brome (6%).

4. Black greasewood/Alkali saltgrass

This community is located on the high ground surrounding playas, with soils of the more alkaline Scherrard Series. The topography is nearly level and the ground surface heavily cracked. Several seral stages of this community were found, intergrading into the Alkali saltgrass community described below, apparently in response to fluctuating soil saturation levels during the growing season. Major components as follows: Black greasewood (12%), Alkali saltgrass (56%), Meadow barley (16%), Cheatgrass brome (2%), Rabbitfoot polygomon (2%), Borax weed (18%), claspings pepperweed (23%), Red goosefoot (2%), and Tansymustard (7%).

5. Black greasewood/Alkali saltgrass-Nuttal alkaligrass-Creeping wildrye

This community was found on nearly level lands surrounding some of the larger lakes and ponds of the internally drained basin. Soils are of the Scherrard Series, but the sites were more mesic than the Black greasewood/Alkali saltgrass communities due to the proximity to water. Major components as follows: Black greasewood (7%), Alkali saltgrass (48%), Bottlebrush squirreltail (26%), Nuttal's alkaligrass (7%), Creeping wildrye (16%), Claspings pepperweed (69%), red goosefoot (28%), Pahute weed (11%), and Tansymustard (7%).

6. Alkali saltgrass

This community occupies the land adjoining and surrounding many of the playas and shallower ponds of the internally draining basin system. Soils are of the Crump-Pitt Series, with a nearly level topography maintaining many shallow depressions. The component elements of this community, excepting Alkali saltgrass, were variable site-to-site, reflecting ecological adjustments to constantly varying conditions. Study averages for major components as follows: Alkali saltgrass (95%), Foxtail barley (27%), Bottlebrush squirreltail (3%), Plagiobothrys (10%), Spikerush (2%), and Goosefoot (2%).

The following group of plant communities form a highly complex, often intergrading, vegetal mosaic on the permanently moist to saturated soils at the edges of the sloughs, channels, ponds and marshes. Many of the environmental factors and micro-habitat determinants for specific community dominance on a given site have not been determined as yet. They do, however, in a natural state, have a commonality in being able to migrate remarkable distances year to year in response to fluctuating water levels. Which, in large part, leads to the nearly unmappable complexity of the associations (i.e., last years water edge community may be several feet above or below this years waterline-with resultant partial replacement of unadaptable community components).

7. Alkali saltgrass — Baltic rush

Major components and sample plot constancy (% frequency) as follows: Alkali saltgrass (95%), Baltic rush (56%), Seacoast bulrush (11%), foxtail barley (33%), alkali bluegrass (19%), and up to twelve additional grass and forb species ranging from 0.2 to 2.5 percent frequency.

8. Alkali saltgrass-Borax weed-Nuttal's alkaligrass

A minor community which may, or may not be an intermediate form of another described association, with major components as follows: Alkali saltgrass (100%), Borax weed (63%), Nuttal's alkaligrass (37%), Pahute weed (63%), Deeproot (37%), Saltwort (32%), and Creeping wildrye (19%).

9. Creeping wildrye — Alkali saltgrass

Major components: Creeping wildrye (88%), Alkali saltgrass (53%), and a highly variable array of up to twenty additional grass, sedge and forb species.

10. Creeping wildrye — Baltic rush

Major components: Creeping wildrye (88%), Baltic rush (80%), saltwort (45%), and as many as thirty-five additional grass, sedge and forb species.

11. Creeping wildrye — Baltic rush-seaside arrowgrass

Major components: Creeping wildrye (95%). Baltic rush (79%), Seaside arrowgrass (69%). Saltwort (50%), meadow barley and up to fifteen additional grass, sedge and forb species.

12. Baltic rush -Common silverweed -Creeping spike-rush

Major components: Baltic rush (99%). Common silverweed (81%). Creeping spikerush (59%). Common bur-reed (4%), and an additional eighteen grass, sedge and forb species.

13. Baltic rush -Nevada bluegrass

Found on constantly wet sites, such as Foskett and Dace Springs marshes of Coleman Lake. Major components: Baltic rush (96%),

Nevada bluegrass (51%). Creeping spikerush (61%), sedge species (18%). and twelve additional grass and forb species of minor importance.

14. Creeping spikerush-Narrowleaf water plantain

Found on areas regularly flooded during most of growing season, as in the unchannelled overflow zone between Greaser Reservoir and Crump Lake. Major components: Creeping spikerush (100%), Narrowleaf water plantain (29%). Dock (18%), and several Goosefoot species (9%).

15. Creeping spikerush — Baltic rush-Sedge

Major components: Creeping spikerush (97%). Baltic rush (90%). and two sedge species (99%).

Appendix 2 Scientific Names of plant Species Referred to in Text

(GRASSES)

Alkali bluegrass
Alkali saltgrass
Basin wildrye
Bottlebrush squirreltail
Creeping wildrye
Foxtail barley
Meadow barley
Nevada bluegrass
Nuttal's silksigrass
Rabbitfoot polypogon

Poa juncifolia
Distichlis stricta
Elymus cinereus
Sitanion hystrix
Elymus triticoides
Hordeum jubatum
Hordeum pusillum
Poa nevadensis
Puccinellia nuttalliana
Polypogon monspeliensis

(RUSHES AND SEDGES)

Baltic rush
Broadleaf cattail
Common bur-reed
Creeping spikerush
Hardstem bulrush
Narrowleaf cattail
Seacoast bulrush
Sedge
Spikerush

Juncus balticus
Typha latifolia
Sparganium sp.
Eleocharis palustris
Scirpus acutus
Typha angustifolia
Scirpus maritimus
Carex sp.
Eleocharis sp.

(FORBS)

Borax weed
Clasping pepperweed
Deeproot povertyweed
Dock
Goosefoot
Narrowleaf water plantain
Pahute weed
Plagiobothrys
Red goosefoot
Saltwort
Seaside arrowgrass
Tansymustard
Waterweed
Wigeongrass

Nitrophila occidentalis
Lepidium perfoliatum
Iva axillaris
Rumex sp.
Chenopodium sp.
Alisma gramineum
Suaeda depressa
Plagiobothrys sp.
Chenopodium rubrum
Glaux mariti
Trigochin maritima
Descurainia sp.
Elodea sp.
Ruppia sp.

(SHRUBS)

Big sagebrush
Black greasewood
Gray rabbitbrush
Green rabbitbrush
Shadscale saltbush

Artemisia tridentata
Sarcobatus vermiculatus
Chrysothamnus nauseosus
Chrysothamnus viscidiflorus
Atriplex confertifolia

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Finding of No Significant Impact (FONSI)

The Bureau of Land Management, **Lakeview** District, has analyzed various alternatives for managing wetlands in the Warner Lakes Resource Area. The **alternatives** and associated analysis are described in the attached Plan Amendment and Environmental Assessment made available for public review on March 18, 1988. This environmental assessment is hereby incorporated by reference and attached. The options for management direction identified in the **attached** EA would assure that no significant adverse impacts would **occur** to the human environment.

Under the six alternatives analyzed, significant impacts on the quality of human environment would not occur based on the following considerations:

- Analysis indicated no significant impacts on society as a whole, the affected region, the **affected** interests, or the locality.
- **Public health** or safety would not be **significantly affected**.
- Wetlands and floodplains would be retained in Federal ownership under all alternatives and protected and enhanced to various degrees depending upon alternatives.
- The alternatives are not related to other actions with potential for cumulatively significant impacts to the important and relevant resource values for the areas involved.
- **Cultural resources** on or eligible for the National Register of Historic Places would not be affected. Native American religious sites would not be affected.

- The alternatives would not significantly affect endangered or threatened species or their **habitat** determined to be critical under the Endangered Species Act of 1973.

The alternatives do not violate federal, state, and local law requirements imposed for environmental protection. There are no known inconsistencies **with** officially approved or adopted federal, state or local natural resource related plans, policies or programs.

Adverse impacts identified are minimal. Continued resource monitoring would ensure that no significant adverse impacts **occur**. As needed, appropriate management would be instituted to protect important natural and cultural resource values. Impacts to threatened or endangered species habitat **or** cultural **resources**, which **could not be** mitigated, would trigger public ownership retention.

- The alternatives would not significantly **alter** other approved land use allocations or resource management direction in the existing Warner Lakes land use plans.

FONSI Determination

On the basis of the information contained in this Environmental Assessment and all other information available to me as summarized above, it is my determination that **none** of the six alternatives constitute a major federal action significantly affecting the **quality** of the human environment (a finding of no significant action). Therefore, an environmental impact statement is unnecessary and will not be prepared. In addition, the amendments to the Warner Lakes Management Framework Plan do not substantially affect other resource programs to the extent that the district would initiate a Resource Management Plan/Environmental Impact Statement.



BLM-OR-ES49-4-1792