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UPPER LAKE CREEK
SPECIAL RECREATION MANAGEMENT AREA
RECREATION AREA MANAGEMENT PLAN

ENVIRONMENTAL ASSESSMENT
NO. OR095-04-08

January, 2005

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**ENVIRONMENTAL ASSESSMENT
NO. OR095-03-07**

1.0 INTRODUCTION

1.1 Background

The Upper Lake Creek Special Recreation Management Area (SRMA) encompasses approximately 13,000 acres located in northwest Lane County and south Benton County, Oregon. (See Map 1)The SRMA is a 45 minute drive for over 200,000 residents living in the Eugene/Springfield metropolitan area. The smaller rural communities of Blachly, Horton, Triangle Lake, and Greenleaf are located nearby. The public lands encompass all of Sections 7, 17, 18, and 19 of Township 15 South, Range 6 West; and Sections 7-29 of Township 15 South, Range 7 West; Willamette Meridian. The BLM Eugene District administers approximately 87 percent of the acreage within the SRMA, which includes Hult Reservoir. In addition, parts of three watersheds are within the SRMA. These include small portions of the South Fork Alsea, the Long Tom, and a large portion of the Lake Creek.

The Upper Lake Creek SRMA was designated in June, 1995, when the BLM Eugene District issued the Record of Decision and Resource Management Plan (RMP) for the BLM administered lands. The RMP directs the development of a Recreation Area Management Plan (RAMP) for Upper Lake Creek SRMA to address a wide range of developed and dispersed recreation opportunities that would contribute to meet projected recreation demand.

The boundary of the Upper Lake Creek SRMA is identical to the North Lake Creek Timber Sale Planning Area. The North Lake Creek Thinning Project Environmental Analysis (EA) (EA # OR090-04-07) considers alternatives for timber harvest and other forest management activities for this same area. Implementation of both projects is expected to begin in 2005.

1.2 Purpose and Need

The purpose of the RAMP is to guide overall recreation management within the Upper Lake Creek SRMA. The need is established in the RMP which directs that a RAMP be prepared for each SRMA. Additional site specific environmental analyses may be necessary for the development of recreation facilities and other management actions that are outlined in the RAMP.

This EA also serves as the decision making document for the RAMP and for road and trail designations that were listed in the Eugene RMP (1995) and recommended in the Lake Creek Transportation Management Plan (2002).

1.3 Management Objectives for the SRMA

1.3.1 Objective #1

Provide a variety of natural resource-dependent recreation activities that will: (1) protect natural, cultural, and scenic resources; (2) protect or maintain water quality; (3) promote human health and safety; (4) respect private property rights; (5) minimize conflicts among visitors; and (6) ensure sound stewardship of public lands.

1.3.2 Objective #2

Provide a safe, natural, well-designed, accessible recreation experience for all visitors. Use visitor information and interpretation as a primary tool to protect sensitive resources, discourage vandalism, and encourage visitor appreciation of public lands.

1.3.3 Objective #3

Establish and maintain a professionally-managed recreation area, with an appropriate on-the-ground presence of well-trained personnel, and to foster partnerships and community involvement in recreation management.

1.3.4 Objective # 4

Develop recreation sites and facilities that are compatible with the Aquatic Conservation Strategy (ACS) objectives and other BLM policies, as well as maintain or enhance the ecological health of watersheds and aquatic ecosystems.

1.4 Conformance with Land Use Plans

The Upper Lake Creek SRMA RAMP is in conformance with the *Eugene District Resource Management Plan (RMP)* (June 1995), as amended. Additional information is available in the Upper Lake Creek SRMA RAMP project analysis file. This file and the above referenced documents are available for review at the Eugene District Office.

2.0 ISSUES AND PUBLIC Scoping

2.1 Scoping

Major recreation issues were identified through a scoping process which included: a visitor questionnaire; public meetings; BLM interdisciplinary team meetings; and coordination with other Federal, state and local government agencies. The public helped to identify and rank the long-term levels of recreation use, services, and environmental protection desired for the SRMA. The public scoping meetings also identified a number of issues, concerns, and opportunities related to recreation use and recreation management for the SRMA. Refer to the RAMP, Appendix A, for more detailed information regarding the public scoping process.

2.2 Issues Selected for Analysis

The following issues were identified through extensive public participation in the RAMP scoping and planning process and interdisciplinary teamwork.

2.2.1 Issue #1 - *How does recreation management affect public health and safety?*

Some recreation activities within the SRMA create safety hazards for other recreation visitors, woods workers, private property owners, and BLM personnel. Examples include: indiscriminate target shooting near Hult Reservoir and major access roads; trash dumping; improper disposal of human waste; unattended campfires; degradation of water quality; and riding Off Highway Vehicles (OHVs) off of existing roads and trails. In addition, OHV use on BLM administered roads shared with street legal vehicles (pickup trucks, logging equipment, etc.) was identified as a safety concern.

Measured by: The number and type of recreation facilities and management actions that would help minimize public health and safety concerns.

2.2.2 Issue # 2 - *What kind of recreational opportunities would be emphasized?*

Many public comments addressed the types and levels of recreational use and development that should be allowed within the SRMA. Recreational activities suggested by the public ranged from highly developed intensive recreation uses (e.g., OHV recreation area and RV campground) to virtually no recreation development. A strong opinion was expressed by the public for the area to retain its semi-primitive characteristics, with conservation of wildlife, wetlands, water quality, and scenic beauty identified as the most important management goals within the SRMA.

Measured by: The types of recreational opportunities that would be available for each alternative.

2.2.3 Issue # 3 - How would recreation activities affect natural resources?

Some visitor use patterns within the Upper Lake Creek SRMA have conflicted with resource management and protection goals. For example, dispersed camping adjacent to the Hult Reservoir has caused bank erosion, and water quality degradation. In addition, OHV use in some areas of the SRMA has caused erosion, damage to vegetation, and proliferation of unauthorized routes.

Measured by: The type and degree of effects to specific resources under each alternative.

2.2.4 Issue # 4 - How could private landowners be affected by recreation development?

About 87 percent of the land within the boundary of the Upper Lake Creek SRMA is administered by BLM. However, extensive tracts of lands are owned by timber companies and other private landowners. Most of the private lands are indistinguishable from public lands as a result of not being signed, gated, or posted closed to public entry. Many visitors have a poor understanding of private landowner rights and legal arrangements (e.g., reciprocal right-of-way agreements, road use permits, road easements). As a result, visitors have inadvertently or deliberately committed trespass, fostering a climate of uncertainty and conflict among visitors, private landowners, and BLM.

Measured by: The likelihood of trespass under each alternative.

2.2.5 Issue # 5 - What is the likelihood of a campground fee being charged?

Currently, there are no fees charged to the public for recreational use within the SRMA. Collection of modest fees is one method to assist in meeting the anticipated increase in operations and maintenance needs within the SRMA. The public demand is increasing for camping sites, visitor services, interpretation, and recreation facilities in the SRMA. However, most of the written public comments were opposed to the collection of fees in the SRMA.

Measured by: Whether or not a campground is developed.

2.3 Issues Considered but not Analyzed

What are the effects of the RAMP to Threatened, Endangered, and Special Status Wildlife Species?

The effects of proposed recreation management actions on marbled murrelets, bald eagles, and northern spotted owl were considered but not analyzed for several reasons. No suitable nesting habitat for any of these species would be modified or affected by construction-related activities.

3.0 ALTERNATIVES

3.1 Description of Alternatives

3.1.1 Features/Actions Common to all Action Alternatives

- Development of recreation facilities and management would be based on the guidelines for Roded Natural and Semi-Primitive Motorized classes within the Recreation Opportunity Spectrum (ROS) system (see Appendix B, RAMP for description). The Roded Natural Management Area would encompass about 1,100 acres, in approximately a one-half mile corridor around Hult Pond. The Semi Primitive Motorized Management Area would encompass the remaining 11,975 acres of the SRMA.

- Proposed projects would comply with Visual Resource Management classes II and III in the SRMA as designated by the Eugene District RMP.
- Threatened and Endangered and Special Status Species would be managed consistent with the policies applicable at the time of the action.
- A combination of BLM staff presence, maps, brochures, signs, and other visitor information would be used to promote visitor awareness, appreciation, and interpretation of the SRMA.
- Information kiosks providing visitor information and regulatory, informational and interpretive signs would be installed in both the Roded Natural and Semi-Primitive Motorized management areas.
- BLM rangers and visitors services personnel would increase overall patrols in the SRMA, especially during peak visitation season (June-September).
- A network of 67 miles of roads and trails would be designated “open” for motorized vehicles, including OHVs (See Map 2).
- Approximately 38 miles of existing road would be permanently closed to motorized use. Factors considered for closing roads included: risks to sensitive aquatic and terrestrial habitats; proximity of roads to reserves and Special Management Areas; road impacts to stream channel dynamics; condition of stream crossing culverts; and potential for sediment delivery to streams (Lake Creek Transportation Management Plan, 2002).
 - All roads constructed and/or renovated to access timber sales areas, and identified for closure in the TMP, would be closed to the public after completion of the sale using methods described in the North Lake Creek Thinning EA (USDI, 2004).
 - For roads not associated with timber sales, methods for closure will be determined on a site-specific basis and will include design features to reduce sediment delivery.
- An Access and Travel Management Guide with map would be developed to educate visitors about road designations and allowed uses, including OHVs.
- All ground-disturbing activities would include development and implementation of methods to minimize introduction or spread of invasive weeds.
- Annual visitation, road and trail use by motorized vehicles, and resource impacts would be evaluated and monitored.
- Supplemental regulations would be published to establish a no-shooting zone within the Roded Natural Management Area (within ½ mile of Hult Reservoir), except for hunters with a valid state license.
- Development of facilities and trails would be implemented in the order prescribed in the RAMP and as funding is available

3.1.2 No Action (Alternative A)

Under the no action alternative, current management of the area would continue. Visitor use patterns within the SRMA would evolve with minimal BLM management and visitor contact. Visitor uses such as camping, fishing, canoeing, kayaking, etc. would continue to occur on or around Hult Reservoir.

No camp sites or day use facilities would be provided. Other dispersed recreation activities within the SRMA boundary, such as horseback riding, target shooting, hunting, and OHV use would continue to occur. There would be no development of trails for motorized or non-motorized trail use in the SRMA. Many recreation activities, such as dispersed camping, fishing, boating, OHV use, and target shooting are expected to increase in the future, based on population growth in Lane County.

Under this alternative, all 105 miles of road currently designated for public use would remain open to motorized use, including 38 miles of road that were listed for closure in the Eugene RMP and the Lake Creek TMP. Roads would continue to be inadequately signed/posted.

3.1.3 Rustic Recreation Facilities and Non-Motorized Trail Development (Alternative B) - Proposed Alternative

This alternative would emphasize development of rustic recreation facilities at Hult Reservoir and development of a non-motorized trail system in the SRMA. (See Map 2) Management actions at the Reservoir would focus on rustic facilities development to enhance visitor comfort; improve public health and safety; and protect the natural, scenic, and cultural values of the SRMA. Facilities would include: an improved boat launch for non-motorized boats and other small watercraft, fishing pier, day-use picnic area with parking, 10-15 unit dry campground, permanent vault restrooms, trash facilities, and educational kiosks or wayside exhibits.

In order to enhance hiking and equestrian opportunities within the SRMA, approximately 8 miles of multiple-use, non-motorized trails would be created from renovation of abandoned logging roads (6-7 miles) and new construction of approximately 2 miles of connecting trail segments. A trailhead would be developed at the old Mill site south of Hult Reservoir that would include an educational kiosk; vault restroom; trash receptacles; horse corrals and hitches; and parking area. The number of law enforcement and visitor services patrols would be higher than Alternative A and C, but lower than under Alternative D.

3.1.4 Non-Motorized Trails (Alternative C)

This alternative would emphasize non-motorized recreation use (horseback riding, hiking) in the SRMA through development of approximately 8 miles of multiple-use trails. These trails would be created from renovation of abandoned logging roads (6-7 miles) and new construction of approximately 2 miles of connecting trail segments. A non-motorized trailhead would be developed at the old Mill site south of Hult Reservoir. Trailhead facilities include: educational kiosk, vault restroom, trash receptacles, horse corrals and hitches, and parking area. The number of law enforcement and visitor services patrols would increase over current levels, but would be lower than under Alternative B.

3.1.5 Motorized Trails (Alternative D)

The motorized trail alternative would emphasize management and enhancement of motorized recreation trail use for OHVs, jeeps, 4x4 trucks, motorcycles, and all-terrain vehicles. Approximately 8 miles of motorized trails would be created from renovation of abandoned logging roads (6-7 miles) and linked by approximately 2 miles of connecting trail segments. Two OHV staging areas would be developed, with one of them located at the Mill site south of Hult Reservoir. The location for the second staging area has not been determined at this time. Development of staging areas would include: 2 educational kiosks, 2 vault restrooms, trash facilities, and parking areas. The number of law enforcement and visitor services patrols would be highest under this alternative.

Table 1: Summary of Proposed Facilities and Road Designations by Alternative

	Alternative A	Alternative B (Proposed Action)	Alternative C	Alternative D
Facility	No Action	Day Use Campground Non-motorized use	Non-motorized use	Motorized use
Campground	None	Yes	None	None
Improved Boat Launch Facility	None	Yes	None	None
Day-use Parking Lot	None	Yes	None	None
Day-use Picnic Area Facility	None	Yes	None	None
Installation of Kiosks or Wayside Exhibits	None	3	1	2
Fishing Pier Facility	None	Yes	None	None
Vault Restrooms	None	3	1	2
Trash Facilities	1	3	1	1
Existing Roads open to motorized use	105 miles	67 miles	67 miles	67 miles
Roads closed to motorized use	0	38 miles	38 miles	38 miles
Non-Motorized Trails Renovation of existing roads New trail construction	None	6-7 miles 2 miles	6-7 Miles 2 miles	None
Motorized Trails Renovation of existing roads New trail construction	None	None	None	6-7 miles 2 miles
Trailhead / Staging Area Development	None	1 Equestrian / hiking	1 Equestrian / hiking	2 Motorized

3.2 Alternatives Considered but Eliminated from Evaluation

An alternative was considered for development and management of an intensive OHV recreation area. The following were considered for development of OHV related recreation: two OHV staging areas; new trail construction to accommodate all terrain vehicles (ATV) and motorcycles; a campground designed for OHV use; and OHV play areas to accommodate motorcycles, all terrain vehicles, and 4x4 vehicles. The SRMA features of steep terrain, soil texture, and high rainfall create the potential for high rates of surface erosion and subsequent sediment delivery into streams. Under these conditions, the BLM could not construct and maintain an extensive motorized trail system that would meet the Aquatic Conservation Strategy objectives and other goals for wildlife conservation and forest health. This alternative was eliminated from further detailed analysis.

4.0 EXISTING CONDITIONS

This section describes the existing environment that may be influenced or affected by proposed recreation management activities and the No Action Alternative. This information forms the baseline for measuring changes and comparing the Proposed Action to the other Alternatives.

4.1 Forestry

Most of the land use classification within the SRMA is General Forest Management Area (GFMA) or Matrix lands. In GFMA, forests are managed actively to promote forest health, emphasizing tree vigor and fire resistance. GFMA lands are managed to produce a sustainable supply of timber and other forest commodities to provide jobs and contribute to community stability. There are 9,000 acres of Matrix and 3,700 acres of Late Successional Reserve (LSR) Land Use Allocations within the SRMA boundary.

4.2 Vegetation/Botany

The SRMA lies within the western hemlock vegetation (*Tsuga heterophylla*) zone, named for the “climax species” that theoretically dominates the forested plant community in the absence of natural disturbances such as fire and wind-throw.

The watershed above Hult Reservoir is the most popular area for commercial mushroom harvest on the Eugene District. Species collected include Pacific golden chanterelle (*Cantharellus formosus*), spreading hedgehog mushroom (*Hydnum repandum*), and winter chanterelle (*Craterellus neotubaeformis*). American matsutake (*Tricholoma magnivelare*) and King bolete (*Boletus edulis*) are found in the SRMA, but no permits have been issued for commercial collection.

4.2.1 Special Management Areas

The Hult Marsh Area of Critical Environmental Concern (ACEC), about 167 acres, includes the northern portion of Hult Reservoir. It was designated to preserve its botanically rich assemblage of aquatic bog, marsh, and riparian vegetation, including habitat for two BLM Assessment Species. Within the ACEC, recreation use and environmental education activities are allowed as long as they are compatible with the protection of important resource values of the ACEC.

4.2.2 Special Status (Plant) Species

Two Bureau Assessment Species of vascular plants, bog club moss (*Lycopodiella inundata*) and humped bladderwort (*Utricularia gibba*), occur in the Hult Marsh ACEC, on the north and east edges of the reservoir. The former grows on partially submerged logs and peat mats, and the latter grows in quiet, shallow water. Both species are sensitive to water quality, physical disturbance, and invasive aquatic weeds.

4.2.3 Non-Native and Noxious Plants

The species composition within the SRMA boundary has been modified by inadvertent and deliberate introduction of non-native plant species. Non-native species common in this watershed were introduced as orchard, food-crop, hedgerow and ornamental plants. Roads and ground-disturbing activities such as logging are now primary vectors for the establishment and spread of noxious and non-native plant species.

Some State-of-Oregon-listed noxious weeds that occur in the SRMA include: false brome (*Brachypodium sylvaticum*), meadow knapweed (*Centaurea pratensis*), Canada thistle (*Cirsium arvense*), Scotch broom (*Cystisus scoparius*), common St. Johnswort (*Hypericum perforatum*), bull thistle (*Cirsium vulgare*), Japanese knotweed (*Polygonum cuspidatum*), poison hemlock (*Conium maculatum*), Himalayan blackberry (*Rubus armeniacus*), and tansy ragwort (*Senecio jacobaea*). Meadow knapweed is found along roadsides and on agricultural lands in this area. So far, it is not a problem on forested lands. Canada thistle, bull thistle, common St. Johnswort, and tansy ragwort are common and widely established on roadsides, and can be found in recently logged areas. Scotch broom and Himalayan blackberry can form dense thickets along roadsides and in pastures and are also found in recently logged areas. Control of these weeds can be particularly challenging and these species can be detrimental to native plant diversity. A large number of other non-native species occur in disturbed areas, on roadsides, and in meadows.

False brome can dominate disturbed areas to the near exclusion of other herbaceous species. It is more shade tolerant than other noxious weeds, and can thrive under thinned canopies. This grass is known to exist along roads in five sections of the SRMA. Road maintenance, particularly blading, appears to contribute to the spread of this species. In addition, motorized vehicles and OHV

use are contributing to the spread of false brome along roads in the SRMA. Monitoring by BLM personnel has determined that the spread of false brome is limited to road corridors and is not yet found in the interior of the SRMA. As yet, false brome has not been found off roadsides in the SRMA. Treatments to control this species on the Eugene District began in 2003.

The Eugene District has initiated control methods in the SRMA as part of a District-wide weed strategy including: hot foam applications (using specialized equipment) for false brome infestations; cutting and grubbing of meadow knapweed, Scotch broom, and Himalayan blackberry.

Parrot feather (*Myriophyllum aquaticum*) is an aggressive aquatic weed that occurs in Hult Reservoir. This weed spreads by fragmentation and is transported to new water bodies, primarily by boats. The plant is currently localized, along the edge of Hult Reservoir, and has not yet infested areas where water depth is greater than three feet (where most boat traffic occurs). Large infestations of this weed can potentially alter water quality and pose a threat to aquatic life, including the bog club-moss and humped bladderwort. Current methods to control parrot feather include manual removal of plants approximately every two years, and informational signs that encourage voluntary boat inspection and cleaning to prevent further spread. Purple loosestrife (*Lythrum salicaria*) and waterweed (*Elodea spp.*) are also known to occur in the Lake Creek Watershed. If these noxious weeds were to be introduced into the Hult Marsh ACEC they could also pose a threat to the two previously mentioned Bureau Assessment plants.

4.3 Visual Resources

The Eugene District RMP designated the SRMA as Visual Resource Management (VRM) classes II & III. The VRM system provides a means to identify visual values, establish objectives through the RMP process for managing these values, and to design proposed projects to ensure that VRM objectives are met.

The VRM management class II area encompasses the entire Hult Reservoir viewshed. Within the viewshed, the level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Changes should repeat the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.

The VRM Class III area includes the remaining lands within the SRMA. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements of form, line color, texture, and scale found in the predominant natural features of the characteristic landscape.

4.4 Cultural Resources

4.4.1 Background

In December 1994, BLM entered into a Memorandum of Understanding (MOU) with the Oregon State Historic Preservation Office. The MOU recognized few cultural values had been discovered in the Coast Range. As a result, BLM and Oregon State Historic Preservation Office agreed that the probability of finding important historic properties prior to project implementation was minimal, and pre-project cultural resource survey would be halted. As of March 2004, no significant cultural values were discovered during the course of the several cultural resource surveys conducted within the SRMA boundary.

4.4.2 Prehistory and Ethnography

Most of the SRMA is located in territory claimed by the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, as part of their pre-European contact territory. The Siuslaw Indians, like their neighbors to the north and south, relied

heavily on the yearly salmon runs on the coastal rivers and other estuarine resources and, accordingly, spent most of their time along the lower Siuslaw River and the adjacent coast.

4.5 Terrestrial Wildlife

4.5.1 Threatened and Endangered Species

Northern Spotted Owl

There are four historical spotted owl nesting sites and one recently discovered (2004) nesting site located in the SRMA. Nine additional sites occur within 1.5 miles (the home range for spotted owls in the North Coast Province is, on average, an area with a 1.5 mile radius). Of the sites within the SRMA boundary, as of 2004, two are currently occupied by owl pairs,.

Suitable nesting habitat for the spotted owl is generally defined as mixed Douglas fir stands 80 years old or older (late-successional forest) which provide nesting, roosting and foraging habitat. Approximately 5% (660 acres) of BLM lands within the SRMA are 80 years or older.

Approximately 70% (9,300 acres) of the SRMA currently is dispersal habitat for the northern spotted owl. Dispersal habitat is defined as forests stands with an average diameter at breast height (dbh) of 11 inches and minimum of 40% canopy closure in which owls can roost and forage. These stands are typically 40 years old or older. There is no spotted owl critical habitat within the SRMA.

Marbled Murrelet

The SRMA lies within the 35 mile limit of the inland nesting range of marbled murrelet in Oregon (USDA Forest Service et al. 1993, pp IV-15-IV-17). Most nesting on BLM lands within the Eugene District occurs within 20-35 miles of the coast. Some birds have nested further inland, but survey detections become less common as distance from the ocean increases.

Marbled murrelet Critical Habitat Units (CHU) on the Eugene District fall within the LSR Land Use Allocation (LUA) and are managed accordingly. The SRMA contains approximately 3,500 acres of CHU OR-04-J. Since no sections of LSR would be affected, there would be no effect to murrelet critical habitat within the SRMA.

Suitable habitat for marbled murrelets in western Oregon is generally defined as mixed Douglas-fir stands 80 years or older. Stands of this age provide the large branches and cover required by these birds for nesting. There are approximately 800 acres of suitable habitat in the SRMA on federal and private lands.

Approximately 660 acres of this habitat is on BLM-managed lands. Although these birds are closely associated with late-successional stands, younger stands capable of attaining suitable characteristics within 20 years and possessing some nesting structure could support nesting murrelets. There are approximately 3,100 acres of this potential habitat within the SRMA boundary.

In 2002 and 2003, murrelet surveys were conducted in portions of the SRMA utilizing both radar and standard protocol surveys. Although murrelet activity was documented, no activity was identified that qualified any stand as occupied (probable nesting) by this species. Additional areas of suitable habitat within the SRMA were surveyed in 2004. Surveys will continue until all potential murrelet habitat has been surveyed according to current protocol.

Bald Eagle

Suitable nesting habitat for bald eagles is typically forest 80 years and older within one mile of a lake, river or major tributary. Although occasional reports have been received of adult eagles in the area during nesting season, to date no nests have been located. The closest known bald eagle nesting site is located

approximately 7.5 miles to the Southeast of the SRMA. Hult Reservoir and Triangle Lake are popular winter foraging areas for bald eagles due to the abundance of fish and wintering waterfowl.

To aid in the recovery of this species, Bald Eagle Habitat Areas (BEHAs) have been delineated around areas that have potential to support these birds of prey. Stands totaling 100 acres have been designated within Section 25, T.15S, R. 7W, which is part of the LSR Land Use Allocation in the SRMA. These areas were selected based on timber stand age and a view of foraging sites at Hult Reservoir. No bald eagles are known to nest in the SRMA.

4.5.2 Special Status Species

Three Special Status Species are known to occur within the proposed action area: the inland tailed frog, a Bureau Assessment Species, and the northern red-legged frog and southern torrent salamander (both Bureau Tracking Species).

A list of other Special Status species known to occur or suspected to occur in the SRMA can be found in Appendix WL-1 of the Lake Creek Watershed Analysis, on file at the Eugene District BLM office.

4.6 Fisheries

The SRMA includes an extensive stream network that is of vital importance to anadromous fish species which include: coho salmon (*Oncorhynchus kisutch*) (listed threatened), searun cutthroat trout (*O. clarki*), Pacific lamprey (*Lampetra tridentata*), and steelhead trout (*O. mykiss*), (1995 Lake Creek Watershed Analysis) (see Map 8).

Over the past two decades, installation of fish ladders at Triangle Lake and Hult Reservoir have expanded usable habitat for anadromous fish species in the Upper Lake Creek Basin. Coho salmon are known to spawn in Lake Creek and its tributaries up to Hult Reservoir. However, annual surveys conducted for coho salmon and steelhead trout have shown the presence of steelhead only in streams above Hult Reservoir. This suggests that coho are not able to negotiate the outfall of the fish ladder below Hult Dam. Recent sampling indicates that coho populations are being maintained in stream reaches below the Hult fish ladder. Of the estimated seven miles of suitable coho spawning and rearing habitat found within the SRMA, only the two miles below Hult Reservoir are currently occupied.

Native resident fish species include cutthroat trout (*O. clarki*), brook lamprey (*L. richardsoni*), sculpins (*Cottus sp.*), redbelt shiners (*Richardsonius balteatus*), and speckled dace (*Rhinichthys osculus*). Approximately 50% of streams in the SRMA area are located above natural barriers and provide habitat for populations of cutthroat trout that might be genetically distinct. Further testing is needed to confirm this distinction. Non-native sport fish have been introduced into Hult Reservoir, including bluegill (*Lepomis macrochirus*), crappie (*Pomoxis sp.*), bullhead (*Ameiurus melas*), and largemouth bass (*Micropoterus salmoides*).

4.7 Water Quality

Most of the SRMA is located within the headwaters of Lake Creek Watershed. Lake Creek is a major tributary of the Siuslaw River. Congdon Creek, a fourth-order tributary of Lake Creek, drains into the southwest portion of the SRMA. Lake Creek, appears on the 2002 Oregon Department of Environmental Quality (ODEQ) 303(d) list as being impaired for summer water temperatures that exceed recommended state limits from the mouth of Lake Creek to the confluence with Congdon Creek. The South Fork of the Alsea River, from mile 0 to 17.2, and Ferguson Creek, from mile 0 to 10.0 appear also on the 2002 ODEQ 303(d) list as being impaired for summer water temperature.

Dispersed camping and other recreational use near Hult Reservoir is causing degradation of water quality due to the lack of restrooms and other sanitary facilities in the area as well as soil erosion and compaction along some areas of the shoreline.

4.8 Geology and Soils

4.8.1 Geology

The Upper Lake Creek SRMA is geologically mapped within the Flournoy/Tyee Formation, consisting of massive and rhythmically bedded feldspathic, micaceous sandstone, and subordinate siltstone. Each bed is graded and ranges from coarse sandstone at the base to fine sandstone and siltstone above. The Prairie Peak ridgeline on the northern edge of the SRMA is composed of sheets, sills, and dikes of mafic basalt rock intrusions. (Walker and Macleod 1991).

High-risk potential for landslides exists in the SRMA. Inventories on BLM lands have identified some areas as potentially unstable. These areas have been withdrawn from timber harvest operations and other management actions. Although many road segments have been identified as unstable, BLM engineers have designed roads to minimize impacts from flood events, concentrated flows of water, and steep unstable slopes.

4.8.2 Soils

Soils in the SRMA area developed from sedimentary rocks and are deep, permeable, and productive. Site index for the soils in the area ranges between 120 and 180 (SCS, 1987). The SRMA is located within the udic-mesic moisture regime and is generally in the Bohannon-Digger-Preacher Soil Association. This map unit typically consists of 40% Bohannon soils, 25% Digger, and 20% Preacher, and may have inclusions of Peavine, Honeygrove, Klickitat, and Blachly. Like much of the Coast Range, soils in the SRMA tend to have rapid permeability, rapid runoff, and a high hazard of water erosion, particularly on steep slopes. The combination of vegetation, slope, soil texture, soil infiltration rates, and climate contribute to a naturally high background erosion rate in the Coast Range.

Unregulated OHV activity has been increasing steadily in recent years and contributes to sedimentation, particularly on un-surfaced roads in wet weather. Rutting from such use creates new channels and delivers sediment directly to streams in some areas. Some heavily traveled roads with insufficient surfacing also contribute to sedimentation during wet weather.

4.9 Recreation

The vast majority of the recreation visitation within the SRMA occurs on or near Hult Reservoir. Most of the visitors are residents from Blachly, Horton, Low Pass, Cheshire, Triangle Lake, Greenleaf, and other rural communities within 50 miles of the SRMA. In recent years, visitation from Eugene and Springfield residents has increased. Visitors from Florence and other rural communities along the Oregon coast, as well as tourists from outside of Oregon, occasionally utilize Hult Reservoir and the lands within the SRMA for a variety of outdoor recreation activities.

4.9.1 Recreation Activities

BLM Eugene District conducted an informal visitor inquiry by questionnaire for the Upper Lake Creek SRMA from 1994 to 1999. The purpose of the questionnaire was to identify current recreation activities within the SRMA, and to solicit public comments on issues and proposed recreation development. A total of 181 questionnaires were submitted to the Eugene District. Most respondents participated in more than one recreation activity. The most common recreation activities identified included: fishing (60%); sightseeing (49%); swimming (45%); picnicking (45%); camping (40%); photography (40%); hiking (30%); hunting (25%); and canoeing (24%). Other recreation activities included: target shooting (20%); motorized off road travel (15%); horseback riding (15%); bicycle riding (13%); backpacking (13%); and motorcycle riding (9%).

During the summer months, water activities such as swimming, canoeing, inner-tubing, rowing, and fishing are popular. Dispersed recreation uses throughout the SRMA include target shooting, hunting, horseback riding, mountain bicycling, scenic driving, and off-highway vehicle use. Big game hunting and special forest products collection such as firewood and mushrooms are popular activities during the fall and winter months. At higher elevations, snow play is a common recreational activity during the winter months.

4.9.2 Recreation Visitation

In 2003, the estimated annual visitation for the SRMA was 7,500 visitors. These figures were compiled by BLM recreation personnel through visitor counts, informal visitor surveys, and visitor contacts. Table 3 provides a summary of visitation in 2003. Peak visitation occurs during the summer months, but visitation remains strong throughout the remaining seasons. The majority of recreation use occurs on or adjacent to Hult Reservoir.

Table 3: Estimated 2003 Visitation Days for Upper Lake Creek SRMA

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
350	350	500	550	600	1,050	1,100	1,150	650	550	300	350	7,500

4.9.3 Recreation Facilities

During the summer months, two portable chemical toilets are provided for campers along the southwest shoreline of Hult Reservoir. A primitive boat launch on the southeast corner of the pond is used to launch canoes, kayaks, row boats, and other water craft with electric motors. No other recreational facilities or amenities are provided for visitors within the SRMA.

Roads - The SRMA has an extensive network of roads that were constructed primarily for timber sale access. A road inventory completed by BLM in 1998 and updated in 2003 identified approximately 105 miles of roads in the SRMA. Road density is about 5.4 miles per square mile. About 55 percent of the roads have a hardened gravel surface and about 50 percent of the roads are mid-slope roads. Stream side roads are common along the tributaries and main stems of Lake Creek and the South Fork of the Alsea River. Stream side roads are also common along the main stems of Congdon and Pucker creeks. Currently, all of the roads in the SRMA are open to both street-legal vehicles and OHVs (all-terrain vehicles, motorcycles, etc.).

Appendix F of *The Eugene District RMP* provides a list of roads to be designated as “open” or “closed” to motorized use. Appendix B of the RAMP provides a complete list of the roads in the SRMA and the proposed designations.

4.9.4 Future Demands / Needs

Public demand for dispersed recreation use within the SRMA is expected to increase in the future. This projection is based on the following assumptions: projected population growth of Oregon; increased urbanization of the Eugene/Springfield metropolitan area; rapidly increasing diversity within the population; focus on resource-dependent outdoor recreation opportunities; and popularity of environmental education and nature study.

The 2000 U.S. Census documented that Oregon’s population increased from 2.84 million in 1990 to 3.42 million in 2000. The 20.4 percent increase makes Oregon the 11th fastest growing state in the nation. Much of the state’s growth occurred in the urban areas along the Interstate 5 corridor between Eugene and Portland. Oregon has shown steady growth despite economic slowdowns. Growth is expected to continue because of the state’s much-touted quality of life and outstanding outdoor recreation attractions.

The 2000 U.S. Census recorded 322,959 residents in Lane County, an increase of 14.2 percent from the 282,912 residents in 1990. In 1990, population had increased by 2.8 percent from 275,226 in 1980.

The close proximity of the SRMA to the Eugene/Springfield metropolitan area makes it a likely destination for an increasing number of visitors over the next decade. In general, families and individuals have less leisure time than in the past (Oregon Department of Parks and Recreation, 2003). This trend will result in increased public demand for recreational activities and access to undeveloped open space closer to home. The SRMA could provide a recreation niche for the large urban population of Lane County, especially residents from the Eugene/Springfield area.

5.0 ENVIRONMENTAL CONSEQUENCES

This section explains and summarizes the direct, indirect, short-term, long-term and cumulative effects of all the alternatives in relation to the identified issues.

This environmental assessment incorporates the analysis of environmental consequences, including cumulative effects, in the USDA Forest Service and USDI Bureau of Land Management "Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl," February 1994, (Chapters 3 & 4) and in the Eugene District "Final Proposed Resource Management Plan/Environmental Impact Statement," November 1994 (Chapter 4). None of the alternatives in this assessment would have effects on resources beyond the range of effects analyzed in the above documents. The following section supplements those analyses, providing site-specific information and analysis particular to the alternatives considered here.

5.1 Past, Present, and Reasonably Foreseeable Future Actions

Public demand for dispersed recreation use within the SRMA is expected to increase in the future, based on projected population growth of Lane County, urbanization of the Eugene/Springfield metropolitan area, and the focus on resource-dependent outdoor recreation. Weed control measures in the SRMA are being implemented as part of a District-Wide Integrated Weed Program that will continue to be in operation for the foreseeable future. Recent BLM timber sales (approximately 790 acres) in the Lake Creek Watershed have included Ten High, Hult View, and Little AI. All of these were thinnings located within the Matrix Land Use Allocation. Future thinning on BLM lands in the North Lake Creek Planning Area (which corresponds to the SRMA boundary) is proposed on up to 5500 acres and will be implemented over a span of 5-10 years beginning in 2005. Activities associated with these timber sale projects include road construction and renovation, and road decommissioning. On private lands, intensive timber management practices such as clearcutting and broadcast burning, are occurring and are likely to continue in the foreseeable future. Other future actions expected to occur on public lands within the SRMA include the Mill Pond Road paving (from Hult Dam east to Grimes Road), scheduled for 2004 and 2005, and the Lake Creek Road paving from Horton to Metric Bridge, scheduled for 2006.

5.2 Unaffected Resources or Critical elements

The following critical elements and resources are either not present or would not be affected by any of the action alternatives: air quality, cultural resources, prime or unique farm lands, Native American religious concerns, solid or hazardous wastes, Wild and Scenic Rivers and Wilderness (Wilderness Study Areas), minority and low income populations.

5.3 Issues Discussed by Alternative

5.3.1 Issue 1 – *How does recreation management affect public health and safety?*

Table 4 summarizes the effects of each alternative for Issue 1.

Alternative A - No Action

Under this alternative, visitor use patterns within the SRMA would continue to evolve with minimal BLM management and visitor contact. The BLM would provide minimal visitor services and no permanent facilities. The number of law enforcement and recreation patrols would remain low. Improper disposal of human waste and dumping of trash would continue to occur (and would likely increase) throughout the SRMA. At the high-use recreation sites and dispersed camping areas near Hult Reservoir, improper waste disposal and trash dumping would result in an increased risk of water contamination and potential health hazard to visitors. Portable chemical toilets would continue to be provided for visitor use during the summer months as a temporary measure to address this issue. However, there would be no portable toilets provided for the remainder of the year. Indiscriminate target shooting at Hult Reservoir would continue to pose a threat to visitors who recreate in the vicinity.

Approximately 105 miles of roads and trails would continue to be available for public motorized use, including OHVs, but most of the roads would not be adequately signed or communicated to the public. With continued low levels of BLM patrols and minimal visitor information about designated road use, there would continue to be safety risks from street-legal vehicles, OHVs and logging trucks using the same BLM administered roads in the SRMA. Recreation personnel and other BLM staff would continue to respond to emergencies, visitor safety concerns, and environmental protection on a case by case basis rather than proactively through long range planning for increased visitor use. For example, if public use were to exceed current levels, additional portable toilets could be rented as a short-term solution for dispersed camper use during the summer.

Alternative B - Proposed Action

Recreational Development at Hult Reservoir

Development of rustic permanent recreation facilities such as vault restrooms and trash collection facilities would reduce risks to public health and safety by minimizing improper disposal of human waste, trash dumping, and water contamination at Hult Reservoir. Visitor awareness and compliance with SRMA rules and regulations would likely increase as a result of increased public outreach and education. The number of law enforcement patrols would increase over current levels which would improve overall visitor awareness and compliance with the SRMA regulations.

The increased presence of BLM staff and volunteers managing the day use area and campground near Hult Reservoir and other recreation activities in the SRMA would contribute to greater visitor comfort and safety. There would be a lower risk to the public from indiscriminate target shooting in the vicinity of Hult Reservoir due to a supplemental regulation that will restrict shooting within one-half mile of the reservoir.

Non-motorized Trail Development

A trailhead would be developed at the old mill site, with vault restrooms and trash disposal facilities. These facilities would minimize improper disposal of human waste and litter in the area. The development of a non-motorized,

multiple-use trail network would provide trails for hiking, horse back riding and other non-motorized uses. This would decrease the potential for encounters/conflicts between non-motorized users and motorized vehicles on BLM administered roads and trails. Increased road and trail designations and SRMA supplemental regulations would reduce potential encounters between street legal vehicles, logging trucks, and OHVs by making visitors more aware of where vehicle use is allowed and the kinds of traffic to expect.

Alternative C - Non-Motorized Trails

Recreational Development at Hult Reservoir

Under this alternative there would be no new facilities at Hult Reservoir and the effects would be the same as described under Alternative A (No action).

Non-motorized Trail Development

The effects associated with development of a non-motorized trail network and trailhead facilities would be the same as those described under Alternative B.

Alternative D - Motorized Trails

Motorized Trail Development

Under this alternative, vault restrooms and trash disposal facilities at two motorized staging areas would reduce risks to public health and safety by minimizing improper disposal of human waste and trash dumping in these areas.

The number of law enforcement patrols would be highest under this alternative and would help improve overall visitor awareness and compliance with road and trail designations and SRMA regulations. However, with increased motorized use of the SRMA, potential encounters between street-legal vehicles, logging trucks, and OHVs would continue to pose the same degree of risk or higher than the other alternatives.

Recreational Development at Hult Reservoir

Improper disposal of waste and potential water contamination at Hult Reservoir would continue to pose a health hazard due to the lack of permanent facilities.

Table 4: Issue 1 (Health and Safety) - Summarized by Alternatives

Management Actions	Alternative A (No Action)	Alternative B (Proposed Action)	Alternative C (Non-Motorized Use)	Alternative D (Motorized Use)
Type and number of toilet facilities installed	2 seasonal chemical	2-4 permanent facilities	2 seasonal chemical & 1 permanent facility	2 seasonal chemical & 1 permanent facility
Public access to info. on road designations	same	increase	increase	increase
Trash collection facility	1	3	1	2
Level of visitor use at Hult Reservoir	Slight increase	Slight or Moderate increase	Slight increase	Moderate increase
# of Patrols	Low	Moderate	Low	High
Degree of Protection to Water Quality	Low	Moderate	Low	Low
Target Shooting	No restriction	Restricted w/in ½ mile of Hult Res	Restricted w/in ½ mile of Hult Res.	Restricted w/in ½ mile of Hult Res.

5.3.2 Issue 2 – *What kind of recreational opportunities would be emphasized?*

Table 5 summarizes the effects of each alternative for Issue 2.

Alternative A - No Action

The No Action Alternative would allow the existing recreation uses (fishing, sightseeing, boating, picnicking, camping, etc.) to continue. The current level of BLM management in the SRMA would continue with minimal on-site personnel and no permanent recreational facilities. Due to the projected population growth of Lane County and increasing public demand for dispersed recreation use, dispersed camping and other recreation activities in the SRMA are expected to increase. There would be no long-term planning to guide recreation management in the SRMA to accommodate projected increases in annual visitation. Some recreational uses would be temporarily affected by timber harvest operations and hauling due to increased activity on roads by logging equipment and trucks, temporary road/trail closures, and increased noise levels adjacent to harvest units.

Recreational Development at Hult Reservoir

Opportunities to develop permanent facilities and enhance recreational use in the SRMA would be deferred. Some visitors to Hult Reservoir would be deterred from using the area due to the lack of permanent facilities and inadequate access for disabled visitors.

Non-motorized Trail Development

No trails for non-motorized use would be developed. Opportunities for hiking, horseback riding, and other non-motorized trail use in the SRMA would remain limited.

Motorized Trail Development

No trails for motorized use would be developed. A network of 105 miles of roads would remain available for motorized use, including OHVs.

Alternative B - Proposed Alternative

Recreational Development at Hult Reservoir

Development of permanent rustic facilities in the vicinity of Hult Reservoir, including a day-use picnic area, boat launch, fishing pier, and campground, would enhance the recreational experience for visitors, and provide improved access for the disabled. The improved boat launch and fishing pier would increase the appeal of Hult Reservoir for non-motorized boating and fishing.

Non-motorized Trail Development

Opportunities for horseback riding, hiking, and other non-motorized activities would be enhanced. The development of an 8-mile multiple-use trail system, with supporting equestrian trailhead facilities (corrals, rail hitches, parking area) would substantially increase the appeal of the SRMA to non-motorized trail users.

Road Designations

A total of 67 miles of roads would remain open for motorized and non-motorized use and approximately 38 miles of existing roads would be closed to motorized use by the public.

Both Trails and Facilities

The improvement of facilities for day-use, camping, and development of trails for non-motorized use is likely to increase annual visitation to the area around Hult Reservoir to the point that it may negatively impact the experience of some visitors who prefer more solitude and undeveloped recreation opportunities. However, the development of all permanent recreation facilities would be confined to the Roaded Natural Management

Area (within ½ mile of Hult Reservoir), where the highest visitation is likely to occur. These facilities would help to accommodate a higher visitation which is likely to occur under any alternative, based on projected recreation trends in the area. The Semi-primitive Motorized Management Area would remain undeveloped (except for non-motorized trails) for those visitors who wish to experience solitude and a semi-primitive environment in the SRMA. Some recreational uses would be affected temporarily by timber harvest operations and hauling due to increased activity on roads by logging equipment and trucks, temporary road/trail closures, and increased noise levels adjacent to harvest units.

Alternative C - Non-Motorized

Non-motorized Trail Development

Opportunities for horseback riding, hiking, and other non-motorized trail use would be enhanced under this alternative. The development of an 8-mile, multiple-use trail system, with supporting equestrian trailhead facility (corrals, rail hitches, parking area), would substantially increase the appeal of the SRMA to non-motorized trail users. Some recreational uses would be affected by timber harvest operations and hauling due to increased activity on roads by logging equipment and trucks, temporary road/trail closures, and increased noise levels adjacent to harvest units.

Recreational Development at Hult Reservoir

Recreational opportunities in the vicinity of Hult Reservoir would remain the same, with minimal on-site BLM staff and no permanent recreational facilities. The effects associated with this are the same as those described under Alternative A (No action).

Road Designations

Opportunities for motorized use would be eliminated on 38 miles of roads that would be permanently closed to public use. A total of 67 miles of roads and trail would remain open to motorized and non-motorized recreation use.

Alternative D - Motorized Use

Motorized Trail Development

The development of two OHV staging areas and 8 miles of trail designated for motorized use would result in increased opportunities for motorized trail users in the SRMA. Development of facilities and trails for motorized trail users is expected to attract increased motorized recreation in both the Roded Natural (Hult Reservoir) and Semi-Primitive Motorized Management Areas. Some visitors to Hult Reservoir would be deterred from using the area because of increased motorized use. Some recreational uses would be affected temporarily by timber harvest operations and hauling due to increased activity of logging equipment and trucks on roads, temporary road/trail closures, and increased noise levels adjacent to harvest units.

Road Designations

Opportunities for motorized recreation would be eliminated on 38 miles of roads that would be permanently closed to public use. A total of 67 miles of road would remain open to motorized and non-motorized use, including OHVs.

Non-motorized Trail Development

No trails for non-motorized trail use would be developed. Opportunities for hiking, horseback riding, and other non-motorized trail uses in the SRMA would remain limited or decrease from current levels. Non-motorized trail

users may be deterred from using the area due to an increased use of roads and trails by motorized vehicles.

Recreational Development at Hult Reservoir

Increased motorized trail opportunities in the SRMA could result in increased camping and other recreational activities near Hult Reservoir. Management at Hult Reservoir would continue to be limited, with minimal on-site BLM staff and no permanent recreational facilities would be developed to accommodate increased visitation to this area. Some visitors to Hult Reservoir would be deterred from using the area due to the lack of permanent facilities and access for disabled visitors.

Table 5: Issue 2 (Recreation Opportunities) - Summarized by Alternatives

Management Actions	Alternative A (No Action)	Alternative B (Proposed Action)	Alternative C (Non-Motorized Use)	Alternative D (Motorized Use)
Improved boat access	No	Yes	No	No
Miles of designated roads	Approx 105 Miles	Approx 67 Miles	Approx 67 Miles	Approx 67 Miles
Trailhead facilities	0 facilities	1 facility	1 facility	2 facilities
Non-motorized Trails and trailhead facilities	0 miles 0 facilities	8 miles 1 facility	8 miles 1 facility	0 miles 2 facilities
Motorized Trails and staging facilities	0 miles 0 facilities	0 miles 0 facilities	0 miles 0 facilities	8 miles 2 facilities
# of Campgrounds	0	1	0	0
# of Day-use facilities	0	1	0	0
ROS designations	None	RN/ SPM	RN / SPM	RN/ SPM

5.3.3 Issue 3 – How would recreation activities affect natural resources?

SOILS

Alternative A - No Action

Under the no-action alternative, dispersed camping and other recreation activities at Hult Reservoir would continue to result in soil erosion and compaction on sensitive shoreline areas. Motor vehicle use, including OHVs, would continue to occur on 105 miles of designated roads and trails in the SRMA. This includes approximately 38 miles of road recommended for closure in the Lake Creek TMP. Motorized (OHV) use would also continue to occur on un-designated roads and trails in the SRMA.

Motorized use in the SRMA is expected to increase over time, based on projected population growth in Lane County. Although it is difficult to predict actual increases in visitor traffic in the SRMA, higher traffic levels are expected to increase the rate of erosion and potential for sedimentation from some dirt and gravel roads. High rates of erosion can result in soil productivity loss, increased sediment delivery to streams, impaired fish habitat, and reduced water quality. The greatest effects of sedimentation are from dirt roads in close proximity to streams and road segments with stream crossings and cross drains. Heavily used gravel roads along streams can also produce sediment delivery. The primary factors influencing sediment delivery are: traffic levels; road surfacing; and how connected roads are to streams by stream crossings and cross drains.

Under this alternative, visitor use of existing roads and proliferation of new trails by OHVs would continue and likely increase. There would continue to be a low frequency of patrols and limited public outreach and education about road designations and natural resource concerns in the SRMA.

Without more active management of the SRMA, increased levels of motorized use could result in higher levels of sedimentation from higher traffic on some roads and trails as described above. BLM planned road improvements for access to timber harvest units and paving of seven miles along major access routes to Hult Reservoir, would result in some long-term decreases in sedimentation from heavily used roads in the SRMA (USD1, 2004).

Alternative B - Rustic Facilities and Non-motorized Trail Development (Proposed Action)

Recreation Development at Hult Reservoir

Under this alternative, the development of a campground and public use facilities would result in some localized increases in soil compaction. However, areas proposed for development of recreation facilities at Hult Reservoir have a previous history of use and soil compaction from activities such as camping, picnicking, and foot traffic. In the long-term, concentration of day-use and camping activities on developed sites and the eventual elimination of dispersed camping at Hult Reservoir would result in decreased soil erosion and soil compaction in sensitive shoreline areas. There would also be a long-term benefit from public outreach and education about "low impact" use and conservation of natural resources in the SRMA.

Road Designations

Closing of 38 miles of roads would reduce the potential for soil erosion, sedimentation and road failure on a portion of the dirt and gravel roads in the SRMA. Increased signing of designated roads in combination with higher levels of public outreach, education, and BLM patrols would raise public awareness about environmental concerns (soil erosion and sedimentation) with motorized use in the SRMA.

Non-motorized Trails

There would be some increased soil disturbance and compaction from development of a non-motorized trailhead at the old mill site. However, these effects would be minor, as this site has a history of previous disturbance and soil compaction. Some increase in soil erosion and compaction would result from the projected increase in non-motorized use of the 8-mile trail network. These effects are expected to be minor and would be mitigated to a great extent through trail layout and design features.

The improvement of approximately 8 miles of abandoned logging roads and construction of approximately two miles of connecting trail segments has the potential to cause some short-term erosion and subsequent sediment delivery into streams. Site-specific trail design would consider variables such as: slope; soil texture and drainage; and mitigations, such as water bars and sediment traps, to reduce the potential for erosion and subsequent sediment effects to water quality. Site-specific design features and mitigations for trail construction and maintenance would be addressed in project-level planning.

Alternative C - Non- Motorized Trails

Non-motorized Trails

Under this alternative, the effects to soils from developing a non-motorized trail network are the same as those described under Alternative B.

Recreation Development at Hult Reservoir

Dispersed camping and other activities would continue at Hult Reservoir, and the effects of these activities to soils would be the same as described under Alternative A (No Action).

Road Designations

The effects of road designations would be the same as described under Alternative B.

Alternative D - Motorized Use

Recreation Development at Hult Reservoir

Under this alternative, dispersed camping and other activities in the vicinity of Hult Reservoir would continue, and the effects to soils from recreation at the Reservoir are expected to be similar to effects described under Alternative A (No-Action).

Motorized Trails

Localized soil compaction would occur from the construction of motorized trails and two OHV staging areas. One of the staging areas would be constructed at the old mill site, which has a history of industrial use and related soil compaction. The development of a motorized trail network with staging areas would increase the overall use of roads in the SRMA by motorized vehicles and OHVs (motorcycles, ATVs, and other non-street legal vehicles). Although road maintenance would occur on a continual basis, increased motor vehicle and OHV use is expected to cause increased sedimentation and negative effects to water quality in some areas. Signing of designated roads in conjunction with increased levels of public outreach, education, and BLM patrols would increase public awareness of environmental concerns (soil erosion and sedimentation) associated with motorized use in the SRMA.

The construction of approximately two miles of new trail has the potential to cause short-term soil erosion and subsequent sediment delivery into streams. Site-specific trail design would consider variables such as: slope; soil texture and drainage; and mitigations, such as water bars and sediment traps to reduce the potential erosion and subsequent sediment delivery to streams. Site-specific design features and mitigation measures would be developed during project planning to minimize effects to water quality.

Road Designations

Closing of 38 miles of roads would reduce the potential for soil erosion, sedimentation and road failure on a portion of the dirt and gravel roads in the SRMA. However, expected increases in motorized use, including OHVs on the remaining 67 miles of road would likely result in higher levels of sedimentation than under other alternatives on some parts of the road system in the SRMA.

Cumulative Effects - Alternatives B, C, and D

Increases in annual visitation and higher traffic levels on roads in the SRMA are projected for all of the action alternatives and could potentially increase soil erosion and sedimentation from dirt and gravel roads in some areas. However, BLM road improvements planned for accessing timber harvest units and paving of seven miles along two major access routes to Hult Reservoir, are expected to result in long-term decreases in sedimentation from these roads (USDI, 2004).

WATER QUALITY IMPACTS

Alternative A - No Action

Under the No Action alternative, there would be a low frequency of patrols and limited public information would be provided about road designations and natural resources concerns in the SRMA. Without more active management, water quality conditions could potentially degrade as the amount of recreation use increases, in particular, dispersed use near Hult

Reservoir and motorized vehicle use in the rest of the SRMA. Approximately 38 miles of roads recommended for closure in the Lake Creek TMP would remain open to public use. With the projected increases in annual visitation to the SRMA, the physical integrity of the aquatic system, water quality, and the sediment regime may be negatively affected in the long term.

Road improvements planned for proposed access to timber harvest units and paving of seven miles along several access routes to Hult Reservoir are expected to result in long-term decreases in sedimentation along major access routes to the SRMA (USDI, 2004).

Alternative B - Proposed Alternative

Recreation Development at Hult Reservoir

Under the proposed alternative, water quality at Hult Reservoir would improve due to installation of restroom facilities and trash receptacles and the reduction of shoreline compaction associated with dispersed camping. Annual visitation to the SRMA, especially near Hult Reservoir, is expected to increase due to the rising public demand for outdoor recreation. The development of permanent facilities may attract additional visitors to the SRMA. However, improved facilities and more active management (including public outreach and education) would regulate and focus recreational use near Hult Reservoir in a way that would improve this site's capability to accommodate long-term increases in annual visitation with minimal effects to water quality.

Project-specific design features and mitigation measures would be developed to avoid effects to water quality during construction of facilities.

Roads

Closing of 38 miles of road would reduce effects to water quality from sedimentation on a portion of the dirt and gravel roads in the SRMA. On the remaining 67 miles of roads designated as open, some increased sediment production from these roads could be expected if traffic levels increased substantially.

Non-motorized Trails

In order to avoid effects to water quality from trail use, the non-motorized trailhead would be located away from Lake Creek, with a 100-foot buffer strip that would aid in filtering potential runoff. The construction of approximately two miles of new trail with stream crossings has the potential to cause short-term soil erosion and subsequent sediment delivery into streams during construction activities. Trail system design would consider variables such as: slope, soil texture, and drainage; and mitigations, such as water bars and sediment traps, to reduce the potential for erosion and subsequent sediment effects to water quality. Site-specific design features and mitigation measures would be developed during project planning to minimize potential effects to water quality.

Alternative C - Non-Motorized Trails

Non-motorized Trails

The effects to water quality from construction and use of the proposed non-motorized trail network are the same as described under Alternative B.

Recreation Development at Hult Reservoir

No permanent recreational facilities would be developed and the effects are the same as described under Alternative A (No action).

Road Designations

The effects of closing 38 miles of roads would be the same as described under Alternative B.

Alternative D - Motorized Use

Motorized Trails

Under this alternative, the potential increase of motorized vehicle and OHV use on 8 miles of developed trails is likely to result in negative effects to water quality from sedimentation.

Road Designations

The closing of 38 miles of road would reduce effects to water quality from sedimentation on a portion of the dirt and gravel roads in the SRMA. On the remaining 67 miles of designated roads and trails open for motorized vehicle use, some increased sediment production from dirt and gravel roads would be expected if traffic levels increased substantially. Scheduled road maintenance would continue to occur in support of timber operations and other multiple use management activities, but would not completely mitigate effects from higher levels of motorized use on gravel and dirt roads.

Cumulative Effects- Alternatives B, C, and D

Projected increases in annual visitation and higher traffic levels on roads in the SRMA are projected for all of the action alternatives and could potentially increase sedimentation from roads. However, BLM road improvements planned for accessing timber harvest units and paving of seven miles along two major access routes to Hult Reservoir, are expected to result in long-term decreases in sedimentation to streams from these heavily used roads (USDI, 2004).

VEGETATION

Alternative A - No Action

Under this no action alternative, current management in the SRMA and at Hult Reservoir would continue. In the absence of public outreach and education, and additional BLM staff presence, day-use and dispersed camping at Hult Reservoir would continue to result in trampling of vegetation and soil erosions along the shoreline of Hult Reservoir. Interim measures, such as boulder placement, may be used to discourage use of sensitive shoreline areas at Hult Reservoir.

Alternative B - Proposed Alternative

Recreation Development at Hult Reservoir

The proposed development of recreational facilities and an 8-mile non-motorized trail network is likely to attract more visitors to the SRMA which would increase localized effects to vegetation. However, these actions would focus use to designated recreational sites and would be expected to reduce effects to vegetation from dispersed use in the SRMA.

The increased public outreach and education associated with this alternative would have a positive, long-term benefit by educating visitors about the unique and sensitive botanical resources in the SRMA and by directing camping and other uses away from the shoreline at Hult Reservoir and other sensitive areas.

Non-Motorized Trails

Some short-term impacts from soil and vegetation disturbance, and permanent removal of vegetation would result from upgrading abandoned logging roads, construction of one to two miles of new trail segments, and development of day-use and campground facilities at Hult Reservoir. Effects of these projects to botanical resources, including Special Status Species would be minimized by trail layout, site-specific design features, and mitigations developed during project planning.

Alternative C - Non- Motorized Trails

Recreation Development at Hult Reservoir

Under this alternative, there would be no permanent recreational facilities or campgrounds developed at Hult Reservoir and the effects to vegetation from facilities would be similar to those described under Alternative A (No action).

Increased public outreach and education would have a positive effect by educating visitors about unique botanical resources in the SRMA and directing them away from sensitive areas.

Non-Motorized Trails

Effects to vegetation from development of a non-motorized trail network are the same as described under Alternative B.

Alternative D - Motorized Use

Motorized Trails

Development of an 8-mile motorized trail network would result in permanent and localized effects to vegetation from upgrading abandoned logging roads (6-7 miles) and construction of one to two miles of new trail segments. Additional soil and vegetation disturbance may occur as a result of increased motorized use in the SRMA. Effects to botanical resources, including Special Status Species, would be minimized by trail layout, site-specific design features, and mitigations developed during project planning.

Recreation Development at Hult Reservoir

There would be no development of recreation facilities at Hult Reservoir, and the effects to vegetation from facilities would be similar to those described under Alternative A.

Increased public outreach and education would have a positive effect by educating visitors about unique botanical resources in the SRMA and directing them away from sensitive areas.

NOXIOUS WEEDS

Alternative A -No Action

Under the no action alternative, current BLM management practices regarding control of noxious weeds and non-native plants in the SRMA would continue. Noxious weeds would continue to spread along primary roads and trails at the current rates or slightly higher if projected increases in visitation occur. Current rates of spread by motorized vehicles and OHVs in non-designated areas would also continue. However, control/management of weed infestations would be addressed through continued implementation of a District-wide noxious weed control program. Manual control of the aquatic weed, parrot feather, at Hult Reservoir would continue biannually. There would be no new infestations of noxious weeds or non-native plants from ground disturbance associated with construction of recreation facilities and trails. However, there would be no long-term benefit from public outreach and education about noxious weeds and methods of control in the SRMA.

Alternative B - Proposed Alternative

Recreation Development at Hult Reservoir

Ground disturbance associated with the installation of kiosks, signs, and other permanent facilities would result in increased weeds at these sites, in the absence of mitigation. However, the majority of construction for proposed facilities would occur on previously disturbed ground that is already occupied by weeds. Project design features, such as pre- and post-construction weed control, would reduce existing weed infestations and minimize weed spread from construction activities. Increased visitation and

motor vehicle use in the area around Hult Reservoir could promote the spread of noxious weeds to riparian and aquatic plant communities. However, visitation and disturbance are likely to increase under all alternatives, even in the absence of active management.

Increased public outreach and education would have a positive effect by redirecting use to designated areas, and, in the long term, increased public awareness about noxious weeds and participation in weed control could yield a net improvement in controlling the spread of weeds in the SRMA. Closing of dispersed camping areas adjacent to Hult Reservoir would decrease soil and plant disturbance in shoreline areas and improve plant community resistance to noxious weed infestations. The continued ban on use of motorized watercraft in the reservoir would help prevent the spread of aquatic weeds, such as parrot feather, often transferred from the motor blades of motorized boats.

Weed monitoring and noxious weed control would continue to be implemented as part of a District-wide weed strategy, similar to other alternatives.

Non-motorized trail development

Higher levels of equestrian use in the SRMA increases the potential for horses to function as vectors for noxious weeds and other aggressive non-native plants. However, most (85%) of the proposed equestrian/hiking trails would be located on abandoned logging roads, which have been previously disturbed, compacted, and are populated, in large part, by disturbance-adapted plants and weeds. Construction of one to two-miles of connecting trail segments would open previously inaccessible areas of the SRMA to horses and other non-motorized uses. As a result, there would be an increased potential for weed infestations along these new trail segments.

Road Designations

Under all action alternatives, the potential spread of weeds by motor vehicles would decrease along 38 miles of road proposed for closure.

Alternative C - Non- Motorized Trails

Recreation Development at Hult Reservoir

Under this alternative, there would be no permanent facilities or campgrounds constructed, and the effects would be the same as described under Alternative A.

Non-motorized trail development

The effects of developing non-motorized trails are the same as described under Alternative B.

Road Designations

The potential spread of weeds by motor vehicles would decrease along 38 miles of road proposed for closure.

Alternative D -Motorized Use

Motorized trail development

Motor vehicle and OHV use is expected to increase in response to development of motorized trails and staging areas in the SRMA. An increase in the spread of noxious weeds is expected to occur as a result of higher levels of motorized use in the SRMA. If motorized vehicle and OHV use occurs in areas where there are not currently roads or trails, weeds could be introduced into previously undisturbed areas. BLM would provide information about road designations within the SRMA, responsible OHV use, and low impact principles applicable to motorized and other recreational uses. Under this alternative there would be increased monitoring and enforcement to

manage motorized use in the SRMA. However, the potential for new areas of the SRMA being opened to infestations of noxious weeds is likely to increase along the 8 miles of trail developed for motorized trail use. Weed monitoring and noxious weed control in the SRMA would continue to be implemented as part of a District-wide weed strategy similar to other alternatives.

Road Designations

The potential spread of weeds by motor vehicles would decrease along 38 miles of road that would be closed.

Recreation Development at Hult Reservoir

In the vicinity of Hult Reservoir, there would be no permanent facilities or campgrounds constructed, and the effects to weeds would be the same as described under Alternative A.

5.3.4 Issue 4 – How could private landowners be affected by recreation development?

Alternative A -No Action

Under the no action alternative, the current level of recreation management would continue in the SRMA, and no permanent recreation facilities would be constructed. Recreation use within the SRMA is likely to increase, because of the projected population growth of Lane County. BLM would continue to have a limited staff presence to manage recreational use, and minimal public outreach and education would be provided to visitors. Increased visitation to the SRMA, combined with the lack of information for visitors about road designations, land ownership, and allowed uses, could result in a higher incidence of trespass on private property, and conflicts among the public, private landowners, and BLM.

Alternative B - Proposed Alternative

Under this alternative, information about road designations, land ownership, and locations of private property within the boundary of the SRMA would be provided in visitor guides and maps, and in information posted at kiosks, trailheads, and other prominent locations throughout the SRMA. These actions, along with signing of designated roads and trails would likely reduce incidences of private land trespass by visitors to the SRMA.

Alternative C - Non –Motorized

The effects are the same as described under Alternative B.

Alternative D -Motorized Use

The effects are the same as described under Alternative B.

Table 7: Issue 4 (Effects to Private Landowners) - Summarized by Alternatives

Criteria	Alternative A (No Action)	Alternative B (Proposed Action)	Alternative C (Non-Motorized Use)	Alternative D (Motorized Use)
Likelihood of visitor trespass	Increases	Decreases	Decreases	Decreases
Level of public outreach	Remains the same	Increases	Increases	Increases

5.3.5 Issue 5 – What is the likelihood of a campground fee being charged?

Alternative A - No Action

Under this alternative, there would be no campground development and no fee proposed.

Alternative B - Proposed Alternative

Under this alternative, a campground fee may be considered to help cover the costs of building and maintaining a permanent campground facility near Hult

Reservoir. If a campground fee is proposed in the future, the public would be provided with an opportunity to comment on the fee proposal.

Alternative C - Non Motorized

Under this alternative, there would be no campground development and no fee proposed.

Alternative D - Motorized Use

Under this alternative, there would be no campground development and no fee proposed.

6.0 CONSULTATION AND COORDINATION

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA FISHERIES)

ESA Consultation

BLM will conduct Individual project-level consultation with NOAA Fisheries on any actions that may affect coho salmon.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) requires Federal agencies to consult with the Secretary of Commerce regarding any action or proposed action authorized, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH) under the Act. The proposed alternatives, as described and analyzed in this environmental assessment would have "No Effect" on waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

U.S. FISH AND WILDLIFE SERVICE (USFWS)

ESA Consultation

Consultation with the USFWS is required for the Proposed Action. The proposed action "May Affect, but is Not Likely to Adversely Affect" the northern spotted owl due to the loss of 1 acre of spotted owl dispersal habitat due to two miles of new trail construction and degrading of 5 acres of owl dispersal habitat as a result of thinning within the proposed campground. There would be "No Effect" to any other federally listed or proposed species.

Consultation will be initiated in early April, 2005. A response from the U.S. Fish and Wildlife Service (USFWS) in the form of a Biological Opinion would be expected by mid-May, 2005.

If, during the course of this action, new information regarding federally listed species arises, any adverse effects to those species would be mitigated by current protection standards or would be considered in re-initiation of consultation with USFWS.

CONFEDERATED TRIBES OF THE COOS, LOWER UMPQUA, AND SIUSLAW INDIANS

The Bureau of Land Management Siuslaw Resource Area consulted with the Confederated Tribes of Siletz, and the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians. No response was received.

7.0 LIST OF PREPARERS

NAME	TITLE	RESPONSIBILITY
Graham Armstrong	Hydrologist	Hydrology & Water Quality
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Karin Baitis	Soil Scientist	Soils
Mark Conley	Recreation Planner	Technical Guidance
Dan Crannell	T & E Biologist	Wildlife
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Peter Pisani	Engineering Drafsman	Maps
Leo Poole	Fish Biologist	Fish
Mark Stephen	Forest Ecologist	Ecology
Adam Sully	Ranger	Law Enforcement
Mike Southard	Archaeologist	Cultural Resources
Molly Widmer	Botanist	Botany
Gary Wilkinson	GIS	Maps
Ron Wold	Realty Specialist	Lands

8.0 PUBLIC PARTICIPATION

A public notice advertising the availability of this EA and preliminary FONSI will be published in the Eugene Register Guard on February 2, 2005. The EA will be sent to local landowners, interest groups, tribes, state and government agencies, and other members of the public who have expressed interest in management of the SRMA.

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10.0 Glossary and Acronyms

Area of Critical Environmental Concern (ACEC) - An area of BLM administered lands where special management attention is needed to protect important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes; or to protect human life and provide safety from natural hazards.

All-Terrain Vehicle (ATV): A wheeled or tracked vehicle, other than a snowmobile or work vehicle, designed primarily for recreational use or for the transport of property or equipment exclusively on undeveloped road rights-of-way, marshland, open country, or other unprepared surfaces.

Code of Federal Regulations (CFR): The official, legal tabulation of regulations directing federal government activities.

Critical habitat - (1) Specific areas within the habitat occupied by a species at the time it is listed under the Endangered Species Act where there are physical or biological features (i) essential to the conservation of the species and (ii) that may require special management considerations or protection, and (2) specific areas outside the habitat occupied by the species at the time it is listed upon the determination by the Secretary of the Interior that such areas are essential for the conservation of the species.

Cumulative Effects - Impacts on the environment resulting from the incremental effect of the action when added to effects of past, present, and reasonably foreseeable future actions regardless of the agency (federal or nonfederal) or person undertaking such other actions. Cumulative effects can result from individually minor, but collectively similar, actions occurring over a period of time

Cultural Resources - The physical remains of human activity (such as artifacts, ruins, burial mounds, petroglyphs) having scientific, prehistoric, or social values.

Day Use Area - An area primarily set aside for use between sunrise and sunset that may include picnicking, wildlife viewing, or access to a variety of other day-use recreation activities.

Designated Roads and Trails - Specific roads and trails identified by the BLM where some type of motorized vehicle use is appropriate and allowed either seasonally or year-long.

Endangered Species - A species defined in accordance with the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range.

Environmental Assessment (EA) - A systematic analysis of site-specific BLM activities used to determine whether such activities have a significant effect on the quality of the human environment; and whether a formal Environmental Impact Statement is required; and to aid an agency's compliance with NEPA when no EIS is necessary

Environmental Impact Statement (EIS) - A formal document to be filed with the Environmental Protection Agency that considers significant environmental impacts expected from the implementation of a major action.

General Forest Management Area (GFMA) - Forest land managed on a regeneration harvest cycle of 70-110 years. A biological legacy of six to eight green trees per acre would be retained to assure forest health. Commercial thinning would be applied where practicable and where research indicates there would be gains in timber production.

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

Interdisciplinary Team - A group of BLM resource professionals with different expertise that collaborate to develop and evaluate resource management decisions.

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

Land Use Allocation - Commitment of a given area of land or a resource to one or more specific uses (such as campgrounds or Wilderness). In the Northwest Forest Plan, one of the seven allocations of Congressionally Withdrawn Areas, Late-Successional Reserves, Adaptive Management Areas, Managed Late-Successional Areas, Administratively Withdrawn Areas, Riparian Reserves, or Matrix.

Late-Successional Reserves - A forest in its mature and/or old growth stages that have been reserved on Federal land that are managed to protect or enhance old growth forest conditions.

Mitigation Measures - Modifications of actions taken to: (1) avoid impacts by not taking a certain action or parts of an action; (2) minimize impacts by limiting the degree or magnitude of the action and its implementation; (3) rectify impacts by repairing, rehabilitating, or restoring the affected environment; (4) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action; or, (5) compensate for impacts by replacing or providing substitute resources or environments.

National Environmental Policy Act (NEPA) - An Act which encourages productive and enjoyable harmony between man and his environment; promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; enriches the understanding of the ecological systems and natural resources important to the Nation; and established a Council on Environmental Quality.

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

Off-Highway Vehicle (OHV) - Any motorized track or wheeled vehicle designated for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any non-amphibious registered motorboat, (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes, (3) vehicles in official use; (4) any combat or combat support vehicle. The term "Off-Highway Vehicle" will be used in place of the term "Off Road Vehicle" to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same.

Off-Highway Vehicle Designations

Open - Designated areas and trails where Off-Highway Vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.

Limited - Designated Areas and trails where Off-Highway Vehicles are subject to restrictions and vehicle standards set forth in BLM Manual 8341 and 8343.

Closed - Areas and trails where the use of Off-Highway Vehicles is permanently or temporarily prohibited. Emergency use is allowed.

Public Lands - Any land and interest in land (outside of Alaska) managed by the United States Government and administered by the Secretary of the Interior through the BLM.

Recreation Area Management Plan (RAMP) - An officially approved document for a specific geographical area of public land which identifies the management actions to be implemented to achieve recreation related decisions made in a management framework of a resource management plan. The Recreation Area Management Plan is the link

between the allocation of land for recreation uses in the multiple-use planning process and the actions necessary to implement such allocations.

Recreation Opportunity Spectrum (ROS) - A fundamental recreation planning tool that recognizes the critical link between the setting of an activity and the subsequent experience it provides. The ROS provides a framework for defining the types of outdoor recreation opportunities the public might desire, and identifies that portion of the spectrum a given agency might be able to provide. The spectrum contains six classes: Primitive, Semi-Primitive Nonmotorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Modern-Urban (see BLM Manual Part 8320).

Roaded Natural (RN) - The RN class on the ROS describes an environment where natural characteristics remain dominant, but there is moderate evidence of human development, and moderate amounts of contact with other people are expected during recreation

Semi-Primitive Nonmotorized (SPNM) - The SPM class on the ROS describes an area that is predominantly unmodified natural environment with some isolation from human contact.

Rural (R) - The R class on the ROS describes an environment where natural characteristics are modified, human interaction is readily evident, and resource modification and utilization practices are designed to enhance specific recreation activities and maintain vegetative cover and soil.

Resource Management Plan (RMP) - A BLM planning document, prepared in accordance with Section 202 of the Federal Land Policy and Management Act that presents systematic guidelines for making resource management decisions for a planning area.

Scenic Quality - The relative worth of a landscape from a visual perception point of view.

Special Recreation Management Area (SRMA) - Recreation management areas where recognized recreation values exist or where significant public recreation issues or management concerns occur. Special or more intensive types of management are typically needed. Detailed recreation planning is required in these areas and greater managerial investment (e.g. facilities, supervision, etc). They include recreation sites but recreation sites alone do not constitute SRMAs. Detailed recreation planning is required for these areas and greater managerial investment. The size of these management units is typically over 1,000 acres, but exceptions can occur for smaller sites such as very large campground units, trail segments, and specialized day-use area.

Statewide Comprehensive Outdoor Recreation Plan - A plan prepared by the State of Oregon that describes and analyzes the organization and function of the outdoor recreation system of the state. The plan provides an analysis of the roles and responsibilities of major outdoor recreation suppliers; an analysis of demand, supply and needs; issue discussions; an action program to address the issues; and a projected selection process.

Threatened Species - A species defined in accordance with the Endangered Species Act as being likely to become endangered throughout all or a significant portion of its range within the foreseeable future

Timber Production Capability Classification (TPCC) - The process of partitioning forest land into major classes indicating relative suitability to produce timber on a sustained yield basis.

Transportation System - Network of roads used to manage BLM administered lands. Includes BLM controlled roads and some privately controlled roads. It does not include Oregon Department of Transportation, County and municipal roads.

Transportation Management Plan (TMP) - The TMP contains transportation objectives for 231 miles of BLM controlled roads in the Eugene District. A BLM interdisciplinary team analyzed roads and made detailed recommendations on roads that would be open or closed to motorized vehicles, as well as the level of maintenance of open roads. The process involved three phases: (1) mapping and inventory; (2) risk assessments; and (3) transportation management objectives.

Visual Resources - The visible features on a landscape, (e.g.: land, water, vegetation, structures, and other features).

Visual Resource Management Classes - Categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. There are four classes. Each class has an objective that prescribes the amount of modification allowed within the landscape.

Water Quality - The chemical, physical, and biological characteristics of water.

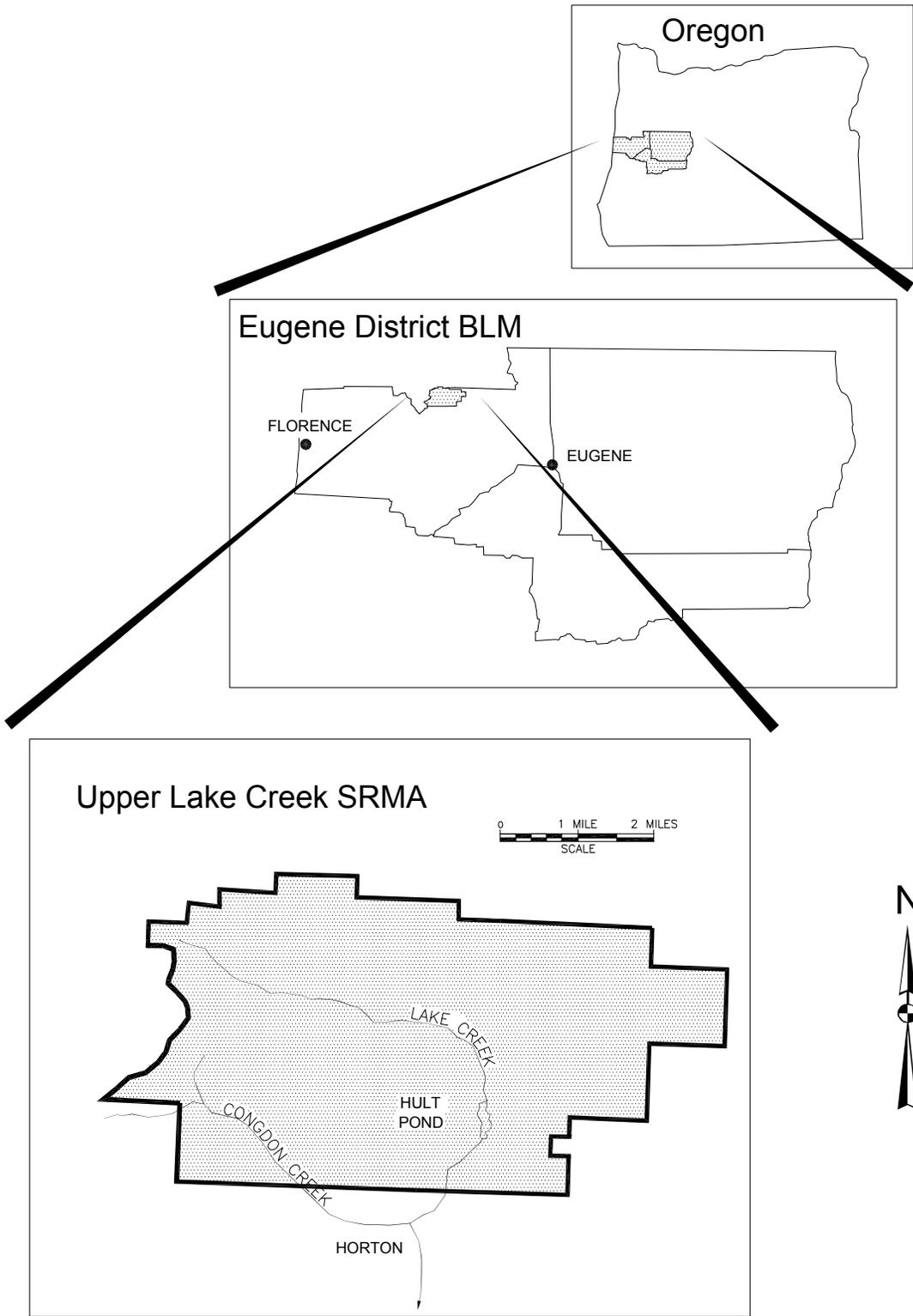
Wetlands or Wetland Habitat - Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for living in saturated soil conditions. Wetlands generally include, but are not limited to, swamps, marshes, bogs and similar areas.

ACRONYMS

ACEC	Area of Critical Environmental Concern	RAMP	Recreation Area Management Plan
ACS	Aquatic Conservation Strategy	ROD	Record of Decision
ATV	All-Terrain Vehicle	ROS	Recreation Opportunity Spectrum
BLM	Bureau of Land Management	RV	Recreational Vehicle
CFR	Code of Federal Regulations	SCORP	Statewide Comprehensive Outdoor Recreation Plan
CMA	Cooperative Management Agreement	SPM	Semi-Primitive Motorized
EA	Environmental Assessment	SPNM	Semi-Primitive Nonmotorized
EIS	Environmental Impact Statement	SRMA	Special Recreation Management Area
FGNW	Fragile Gradient Nonsuitable Woodland	SRP	Special Recreation Permit
FLPMA	Federal Land Policy and Management Act	SUV	Sport Utility Vehicle
FONSI	Finding of No Significant Impact	T&E	Threatened and Endangered Species
GFMA	General Forest Management Area	TPCC	Timber Production Capability Classification
LSR	Late-Successional Reserves	TMP	Transportation Management Plan
NEPA	National Environmental Policy Act	TPCC	Timber Production Capability Classification
OHV	Off-Highway Vehicle	U	Urban
P	Primitive	VRM	Visual Resource Management
R	Rural		
RMP	Resource Management Plan		
RN	Roaded Natural		

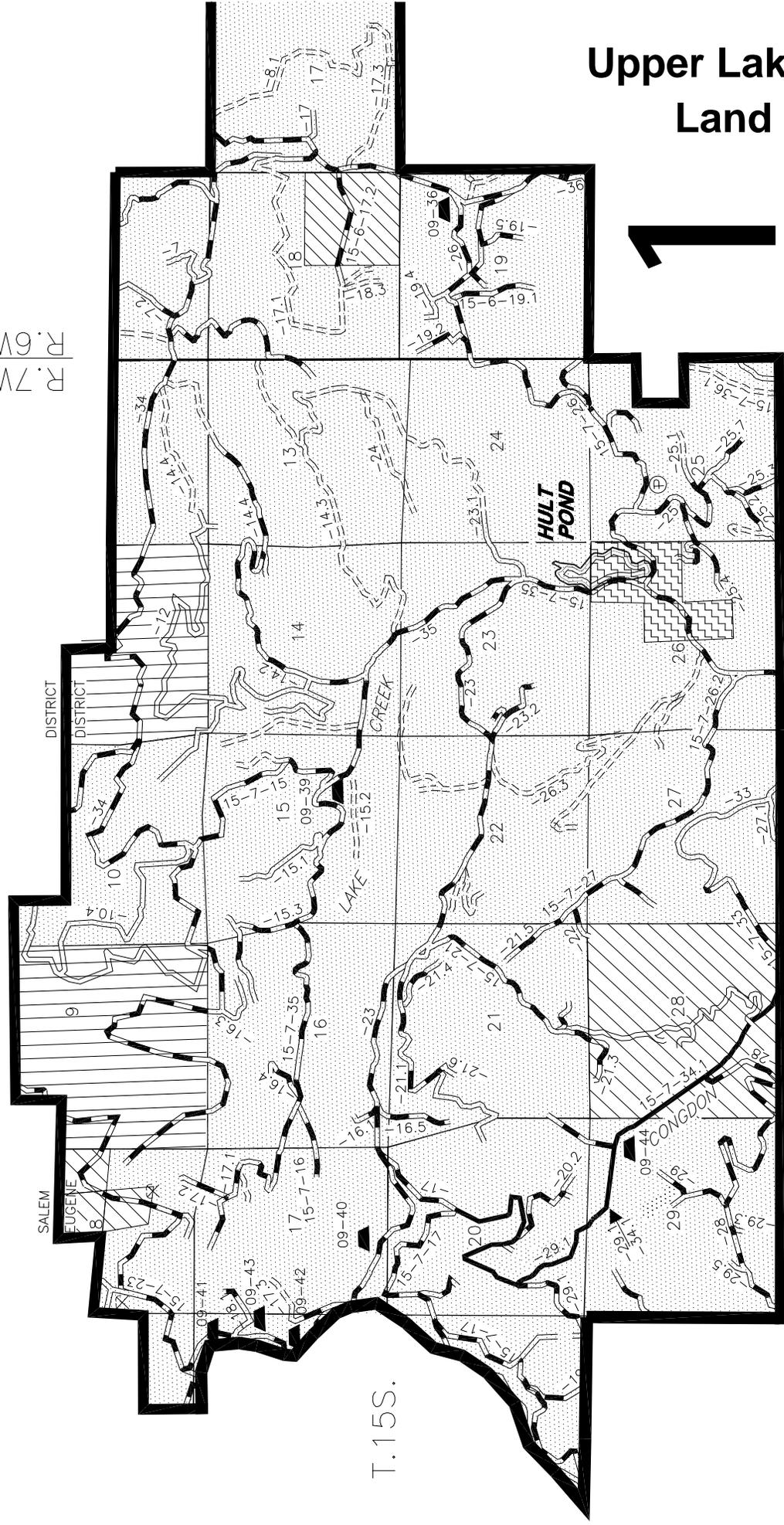
VICINITY MAP

Upper Lake Creek SRMA



Upper Lake Creek SRMA Land Ownership

R. 6V
R. 7V

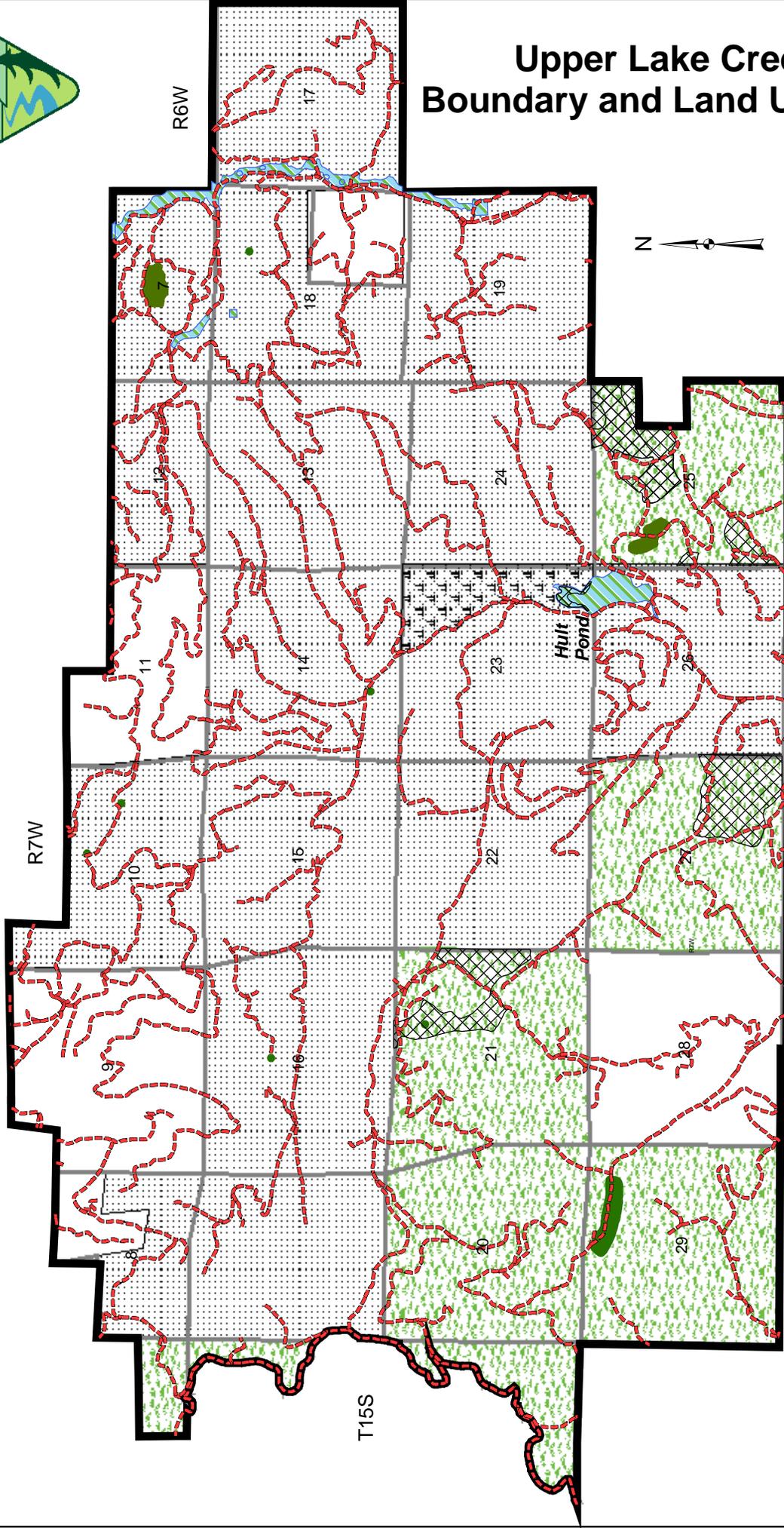


- LEGEND**
- = Frere's Lumber Co.
 - = Weyerhaeuser Co.
 - = BLM O&C Lands
 - = BLM PD Lands
 - = SRMA Boundary

T.15S.



Upper Lake Creek SRMA Boundary and Land Use Allocations



Legend

- Roads
- Sensitive Wildlife Sites
- Sensitive Plant or Progeny Sites
- Sensitive Forest Managed Area
- SRMA Boundary
- Area of Critical Env. Concern

Land Use Allocations

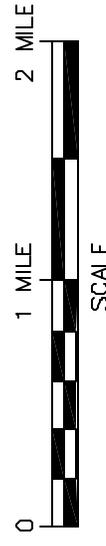
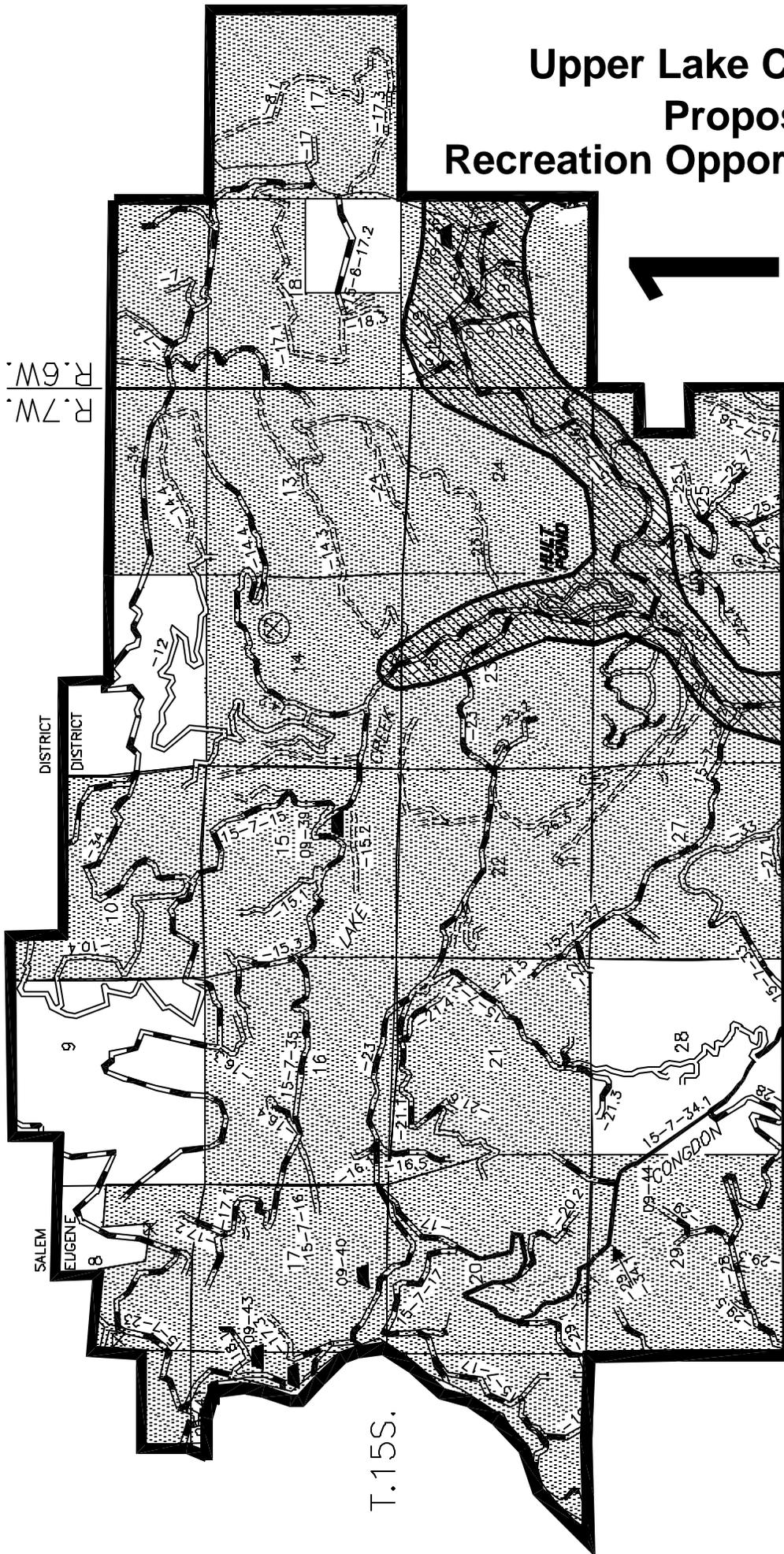
- General Forest Managed Area
- Late Successional Reserve
- Private Lands



Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Map 3

Upper Lake Creek SRMA Proposed Recreation Opportunity Spectrum

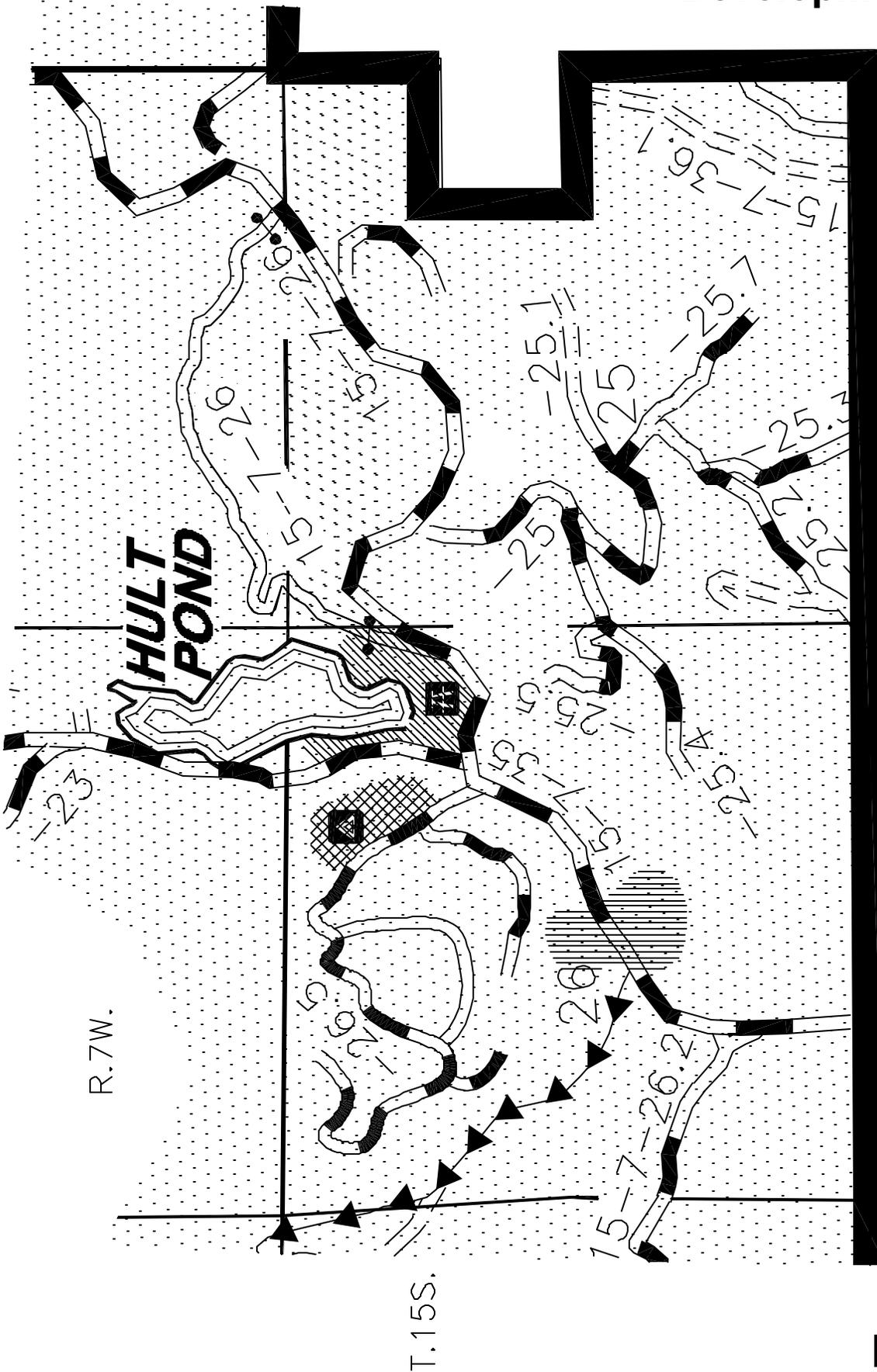


LEGEND

-  = Roaded Natural (RN), BLM Lands
-  = Semi-Primitive Motorized (SPM), BLM Lands
-  = Private Lands
-  = Paved Road
-  = Rock Road
-  = Dirt Road
-  = SRMA Boundary

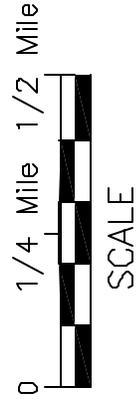
Map 4

Upper Lake Creek SRMA Proposed Recreation Facility Development



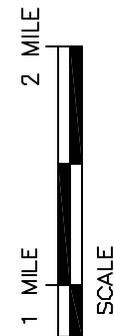
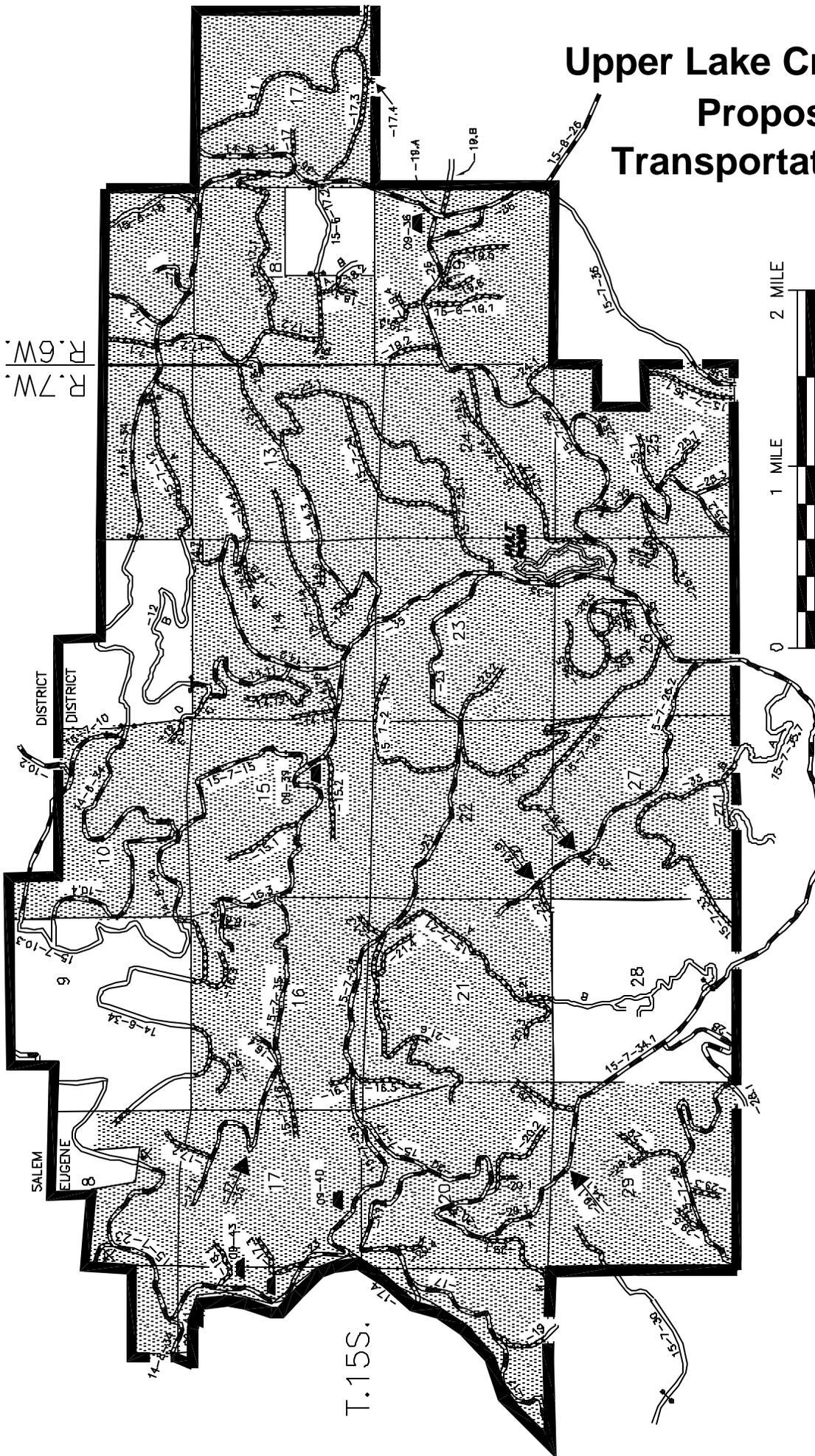
LEGEND

- | | | | | | | | |
|--|-------------------------------------|--|--------------------------------|--|-----------------|--|--------------------------------|
| | = Proposed Day Use Area (Reservoir) | | = Proposed Non-Motorized Trail | | = BLM Lands | | = Campground Area |
| | = Proposed Campsite | | = Rock Road | | = Private Lands | | = Day Use Area |
| | = Proposed Equestrian Trailhead | | = Dirt Road | | = Gate | | = Non-Motorized Trailhead Area |
| | = SRMA Boundary | | | | | | |

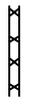


Map 5

Upper Lake Creek SRMA Proposed Transportation Plan

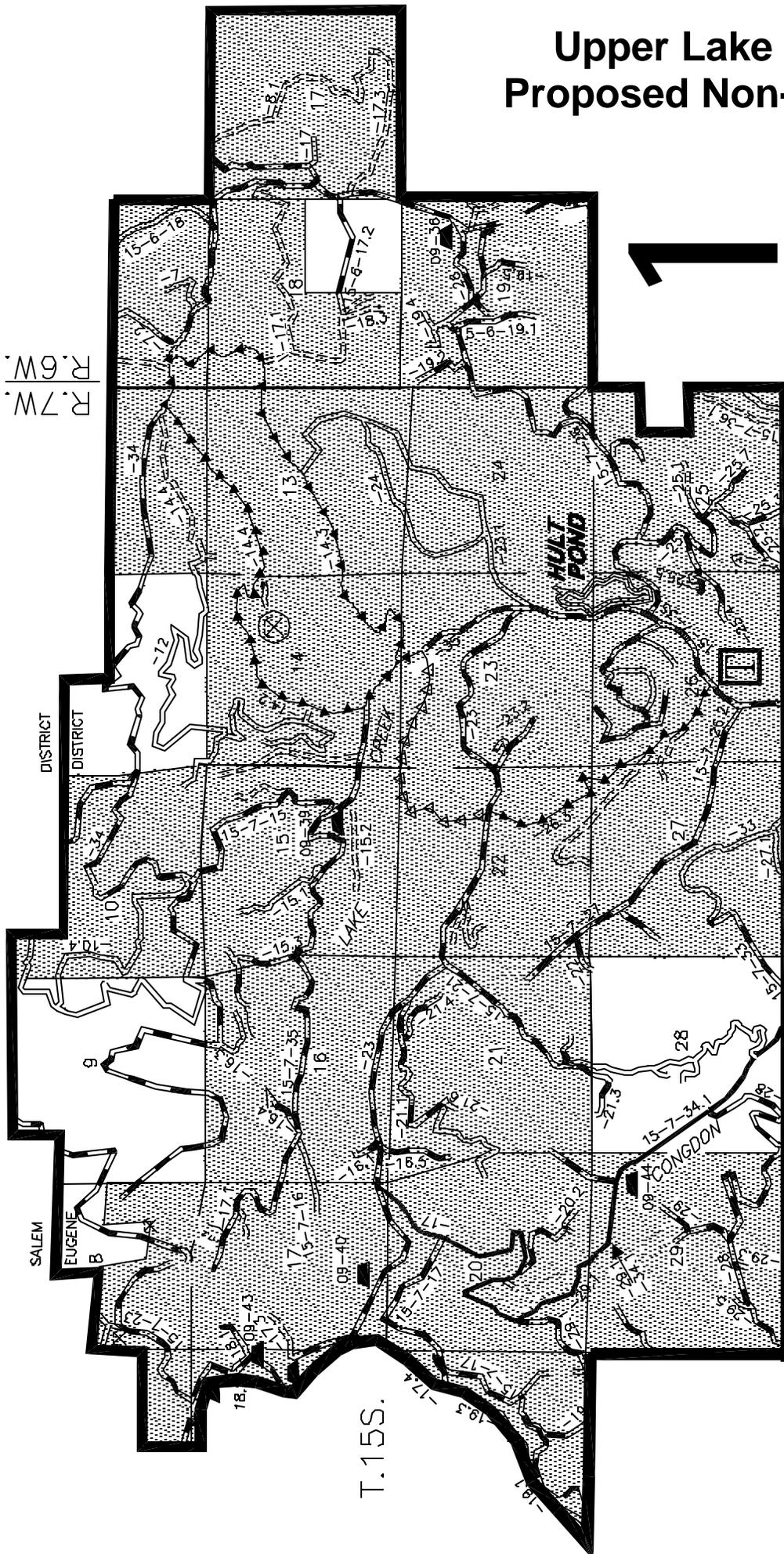


LEGEND

-  = BLM Lands
-  = Private Lands
-  = SRMA Boundary
-  = BLM, Closed Road
-  = BLM, Open Road
-  = Private Controlled Road
-  = Quarry
-  = Gate
-  = Rock Stockpile

Map 6

Upper Lake Creek SRMA Proposed Non-Motorized Trails



SCALE

LEGEND

- = Non-Motorized Trails
- = Proposed Connector Trail Segment
- = Trailhead
- = Quarry
- = Stockpile
- = Paved Road
- = Rock Road
- = Dirt Road
- = Unimproved Road
- = SRMA Boundary
- = BLM Lands
- = Private Lands

BLM PLANNING SYSTEM

