

ORR LAKE RECREATION DEVELOPMENT ENVIRONMENTAL ASSESSMENT

Chapter 1 – Purpose and Need

Background & Existing Condition

In 1997 the Klamath National Forest (KNF), in cooperation with the California Department of Fish and Game (CDFG), Rocky Mountain Elk Foundation (RMEF), and Ducks Unlimited (DU), acquired 4,562 acres of formerly private land around Orr Lake. The property is about 10 miles south of the town of Macdoel in Siskiyou County, California within the boundaries of the Klamath National Forest (see Figure 1, Vicinity Map).

The Orr Lake of today is much larger than that depicted on original Government survey maps [dated 1880]. Sometime after that date, ditches, a dam, and water control devices were constructed that diverted water from Butte Creek and changed seasonal water supplies to year-round supplies. The resultant lake became a popular recreation site (artifacts found along the lake edge suggest that the lake's recreation use dates to at least 1918). Roads were built to and around the lake, further encouraging use. At the time that the Forest Service gained management of the lake, some recreationists had developed the habit of leaving trailers permanently at the lake, for use throughout the late spring, summer and early fall. Such uncontrolled use has brought about rapid resource deterioration. Indiscriminate vehicle use along exposed shoreline areas on the north and east sides has loosened the soil, causing it to be carried away by wind and water. Excavation for drip-line ditches, gray water pits, pad leveling, fire pits, and latrines has occurred adjacent to Orr Lake. These activities further loosen soils, which has speeded erosion along the shores of the lake. Such accelerated erosion has become a resource concern, especially because the action takes place on an archaeological site at the north end of the lake.

Current recreation uses such as fishing, camping, hunting, and picnicking occur at the lake. We estimate that approximately 1,000-1,500 people per year visit Orr Lake. Use is believed to be mostly local, and many residents of the small Butte Valley towns enjoy visiting Orr Lake in the spring, summer, and fall seasons. Groups of 20-30 people, and sometimes as many as 50 people, regularly camp on the north end. On the east side of the lake the Forest Service constructed 3 campsites, installed an accessible vault toilet, and graveled the access road from Bray. With partnership funding from California Department of Boating and Waterways a boat ramp and floating dock have been installed on the east side of Orr Lake. Although it receives moderately heavy use, the north end of the lake has not been developed. Riparian vegetation consisting of willow, broad-leaved sedges, and cattails occurs in narrow strips along the north, east, and west sides of Orr Lake. Currently these areas receive fairly heavy use for fishing and boat launching, as the one existing dock is located on the east side of the lake.

Several cultural resource inspections have been completed in the area around Orr Lake. These include Archaeological Reconnaissance Reports (ARR) #05-05-1400 through 1400K and ARR #05-05-1455. Those cultural resource sites that fall within the area of potential effect for the proposed Orr Lake Recreation Development consists of two American Indian sites whose antecedents are unknown. Currently there are no noxious weeds occurring at Orr Lake (see

botany survey documentation in the project file).

Purpose and Need

When the Forest Service acquired the Orr Lake property a Memorandum of Understanding (MOU) was developed with partners CDFG, RMEF, and DU which states that the organizations will cooperate in managing the land for wildlife and fisheries resources. The KNF amended the Klamath National Forest Land and Resource Management Plan (Forest Plan) to include the Orr Lake Management Unit, and determined that management strategies for the area would emphasize wildlife and fisheries habitat (USDA KNF, 1999). The Forest Plan states that the desired future condition of Orr Lake includes facilities that provide for recreational opportunities including wildlife viewing and fishing, and roads that cause minimal impact to riparian and wildlife resources (USDA KNF, 1995).

Currently the camping area at the north end of Orr Lake has no sanitation facilities, and receives moderately heavy use throughout most of the year. Also, the campsites and roads on the north end of the lake lie on top of a known archaeological site. Comparing the existing conditions to the desired condition of facilities that cause minimal resource impacts identifies the need for sanitary facilities and campsites designed to meet health and safety standards, the need to limit use to a sustainable level, and the need to protect the archeological site from damage. The road that currently connects the north and east side camping areas is directly adjacent to Orr Lake within riparian vegetation. At the northeast corner of the lake this connecting road is lower in elevation than the lake and is subject to seasonal flooding. Comparing the existing condition of the roads to the desired condition of roads that cause minimal impact to riparian and wildlife resources identifies the need to relocate and/or close roads causing damage. The riparian vegetation on the north, east, and west sides of Orr Lake is subject to fairly heavy use for fishing and launching boats, as the only constructed dock occurs on the east side of the lake. Comparing the existing condition to the desired condition of restored wetland and riparian habitats identifies the need to concentrate use, where fishing occurs and boats are launched.

Proposed Action

The Goosenest Ranger District of the KNF proposes to build 2 campgrounds adjacent to Orr Lake, on the east side and north end. The proposed project is located in T44N, R1W, section 17, about 6 miles northwest of the community of Tenant. Orr Lake contains approximately 80 acres of open water and emergent marsh, and is surrounded by about 1000 acres of meadow, seasonal wetland, and streamside vegetation (USDA KNF, 1999). Open water and wetlands associated with Orr Lake are approximately 4,500 ft. in elevation. Refer to the enclosed map. Implementation of the project will occur in several phases. The toilets will be installed over approximately two days in the spring of 2005. New road construction will occur after July 31 during 2006-2008, and the remaining construction and development will occur over 2 – 3 months in the spring and/or summer of 2006-2008. We anticipate that the entire project will be completed in 2008 (see figure 2 map).

The proposed improvements include:

East Side

1. Add one additional campsite (including camping spur) with picnic table, fire grill, lantern hanger, and fire ring.
2. Relocate one campsite to provide greater separation between sites.
3. Construct an information & interpretive station.
4. Construct an entrance sign.
5. Add 2-3 picnic tables for day use.
6. Add a second 1 unit vaulted toilet (one 1-unit vaulted toilet currently exists).
7. Construct a new connecting road from east side to north end further uphill of existing road location. Close existing road and convert to a hiking/biking trail.
8. Drill a water well and provide drinking water at one faucet.
9. Place parking barriers along roads and camping spurs.

North End

1. Place filter fabric and native material over archaeological site.
2. Construct 3 group campsites (2 families each) with double picnic tables and large fire rings.
3. Construct an information & interpretive station.
4. Construct an entrance sign.
5. Construct a day use parking area with 5-6 parking spaces.
6. Construct hiking/biking trails with benches.
7. Plant native vegetation (trees and grasses).
8. Construct a hardened walk-in lake access.
9. Construct a graveled campground road with parking barriers.
10. Install 2 two-unit vault toilets.
11. Drill water well and provide drinking water at one faucet.
12. Place parking barriers along roads and camping spurs.
13. Construct trails to toilets and fishing platforms.

Other

Construct and install 3 fishing platforms, one on the east side of Orr Lake and two on the west side.

Decision to be Made

The decision to be made is whether or not to construct campgrounds and the associated recreation facilities on the north and east shores of Orr Lake, and if so, to determine what design should be used.

Management Direction

National Forest management is guided by various laws, regulations, and policies that provide the framework for all levels of planning. This includes Regional Guides, Land and Resource Management Plans, and site-specific planning documents such as this environmental assessment. These higher-level documents are incorporated by reference and can be obtained from Forest Service offices.

The Forest Plan provides guidance for managing National Forest System lands within the Forest. Guidance from the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (April 13, 1994) is incorporated in the Forest Plan. The Forest Plan was amended by the Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standard and Guidelines on January 12, 2001, by the Record of Decision To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines on March 22, 2004, and by the Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Northern Spotted Owl on March 22, 2004.

The Forest Plan provides two types of management direction, Forestwide direction and Management Area direction. Forestwide direction, which applies to all management areas, is located on pages 4-3 through 4-66. (Note: All page references in this document refer to the version of the Forest Plan that includes all amendments as of 11/21/01 and can be found on the following Forest web page: <http://www.r5.fs.fed.us/klamath/mgmt/lmp/index.html>). Management Area direction for the Orr Lake Management Unit can be found on pages 4-139 through 4-145 of the Forest Plan. The Forest Plan management goals, and standards and guidelines specific to the proposed project are listed below.

Pertinent Management Goals

- 1) Manage the Orr Lake Management Unit as a special area within the Klamath National Forest, with an emphasis on fish and wildlife resources.
- 2) Manage for a productive and resilient wetland, riparian, and upland ecosystem.
- 3) Provide and enhance habitat for Federal and State listed Threatened and/or Endangered species and R5 Forest Service Sensitive species.
- 4) Enhance quality and temporal distribution of wetland and streamside hardwood habitat to benefit water and riparian associated birds including waterfowl, bald eagles, willow flycatchers, greater sandhill cranes, and neotropical migratory birds.
- 5) Manage for a productive recreational fishery, including fishing for a variety of native and

nonnative species, while retaining viable components of wild fish populations that are compatible with habitat conditions.

- 6) Enhance recreational opportunities as long as they complement protection and management of wetland, riparian, aquatic, and upland ecosystems and wildlife habitat needs.

Pertinent Standards & Guidelines

ORR-1: Cooperate with CDFG, RMEF, and DU in the management of the Orr Lake Management Unit, as per the MOU between the KNF and these agencies.

ORR-2: Provide a productive recreational fishery in Orr Lake and in the portion of Butte Creek downstream of the lake. Manage for a native and desired non-native coldwater fishery in the Butte Creek stream system upstream of the lake.

ORR-10: Manage the 44N30X road (the primary access to Orr Lake) as a Moderate Sensitivity Road, offering near natural appearing scenery (Partial Retention) in the road foreground. Manage the Orr Lake Management Unit to display scenery that meets the intent of the updated Forest Visual Quality Objectives map (see Appendix A glossary for unfamiliar terms).

ORR-11: Manage recreational settings to generally achieve Roaded Natural or Semi-Primitive, Motorized Recreation Opportunity Spectrum conditions (see Appendix A glossary for unfamiliar terms).

ORR-12: Manage recreation use at Orr Lake to minimize impacts to wildlife habitat (including bald eagle use areas) and other resource values.

MA 10-2: Identifies interim Riparian Reserve widths.

Public Involvement, Coordination, and Consultation

Scoping is defined as an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. Among other things, the scoping process is used to invite public participation, to help identify public issues, and to obtain public comment early in the analysis process.

Notice of the proposal first appeared in the Fall 2003 Schedule of Proposed Actions for the Klamath National Forest, dated October 3, 2003. The schedule is updated four times a year, posted on the Forest Web Page, and mailed to those who have requested a paper copy. A scoping letter dated June 23, 2004 was mailed to 60 people, groups, and agencies. The scoping letter was sent to those who had expressed interest in an earlier proposal, who were partners in the original land acquisition, and to agencies with responsibilities for local resource management. The scoping letter requested input by July 16, 2004. Two comment letters, one phone call, and one office visit were received in response to the initial scoping.

Archaeologist John Hitchcock has been involved in coordination with Gerald Skelton and Perry Chocktoot of Klamath Tribes concerning the proposed developments at Orr Lake. The Tribes approve of this project; and express continued interest in cooperating and protecting cultural resources on the Goosenest Ranger District.

Meetings were held with representatives of the CDFG, RMEF, and DU. They were asked to review the preliminary site plans for the design of the proposed action. Based on comments received from the CDFG, the Proposed Action was modified to reduce the number of group campsites on the north end. The U.S. Fish and Wildlife Service, through informal consultation with Bobbie DiMonte (wildlife biologist), has agreed that the use of a limited operating period for construction activities will avoid potential effects to the bald eagle, which is federally listed as Threatened. A historic bald eagle nest site is located in the analysis area about 1.3 miles south of the proposed activities. The west side of Orr Lake is commonly used by bald eagles for foraging; thus a bald eagle management area has been designated in this area to protect eagles from habitat loss and disturbance during the breeding season. This management area is less than ½ mile from project activities occurring on the north shore of the lake, and within line of sight of the proposed development on the east side. Considering the historic and current human activity at Orr Lake, it is expected that implementing the proposed project will not disturb eagles that are breeding in the area. Only the new road construction has the potential to disturb foraging and nesting bald eagles. **New road construction will be restricted January 1 – July 31 to avoid direct disturbance to bald eagles during the breeding season.**

The Public Involvement File for the Orr Lake Campground Project documents the efforts made to involve interested members of the public, appropriate agencies, and tribal members in the planning process and the results of those efforts. The file is incorporated by reference and available in the project file. Using the comments from the public and resource specialists, the interdisciplinary team developed a list of issues to address.

Issues

Issues are points of discussion, debate, or dispute about the environmental effects. The Forest Service separates issues into two groups: significant and non-significant issues. Significant issues are identified because of their extent, the duration of the effects, or the intensity of the resource conflict. Due to expert project design, no significant issues were identified for the Orr Lake Recreation Development.

Non-significant Issues

Reasons issues are categorized as non-significant may include: 1) they are outside the scope of the proposed action; 2) they are already decided by law, regulation, Forest Plan, or other higher level decision; 3) they are irrelevant to the decision to be made; or 4) they are conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA) explain this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..." The non-significant issues determined for this project are discussed below.

Retention of Natural Appearance. The developments proposed at Orr Lake will be designed to be consistent with the Roaded Natural setting currently existing at Orr Lake. The Roaded Natural setting is the Recreation Opportunity Spectrum (ROS) determined for this area in the Forest Plan. Project features such as road surfacing, picnic tables, information/interpretive stations, and signs will be constructed with native materials (gravel, wood, etc), compatible with the recreation setting. Colors selected for materials will be environmentally sensitive earth tones.

Disturbance to bald eagles. Unfamiliar noises above ambient level and human presence within ½ mile of an active nest can disturb eagles during the critical breeding period (USDA KNF, 2002). A historic bald eagle nest site is located in the analysis area about 1.3 miles south of the proposed activities. The west side of Orr Lake is commonly used by bald eagles for foraging; thus a bald eagle management area has been designated in this area to protect eagles from habitat loss and disturbance during the breeding season. Considering the historic and current human activity at Orr Lake, it is expected that implementing the proposed project will not disturb eagles that are breeding in the area. Only the new road construction has the potential to disturb foraging and nesting bald eagles. **New road construction will be restricted January 1 – July 31 to avoid direct disturbance to bald eagles during the breeding season.** If the proposed recreation development project caused a significant increase in visitors to Orr Lake, then bald eagles could be indirectly affected by the increase in ambient noise levels of the campgrounds. However, the proposed project is designed to accommodate existing use and we do not expect that visitor use of the site will increase as a result of this project (Talley pers. communication with Bobbie DiMonte, 2004). We do not expect use to increase because use did not appear to increase following significant access road improvements several years ago, and because there will continue to be no directional signs for Orr Lake on the highway or county road. Due to project design, the proposed action will not affect bald eagles in the Orr Lake area.

Chapter 2 – Alternatives, Including the Proposed Action

This chapter describes alternative development, alternatives considered in detail, resource protection measures, and a comparison of alternatives.

Alternative Development

The Proposed Action was developed to meet the purpose and need for action at Orr Lake. Early in the planning process seven other designs were considered, but we determined that they did not meet all aspects of the purpose and need for action. Several other campground and facilities designs were considered and eliminated because they did not accommodate the purpose and need as well as the selected design. The eliminated designs can be found in the Orr Lake Recreation Development project file.

Alternatives Considered in Detail

Two alternatives were considered in detail for the proposed project.

Alternative A - No Action

Alternative A is the "No Action" alternative, in which no project activities would be proposed.

Alternative B – The Proposed Action

The Gooseneck Ranger District of the KNF proposes to develop an existing campground adjacent to Orr Lake, with development on the east side and north end as described in Chapter 1.

Resource Protection Measures Included in the Proposed Action

Air Quality

A standard dust abatement clause will be included in the construction contract.

Noxious Weeds

To prevent the introduction of any noxious weeds into the project area the standard C-clause, 6.36, Equipment Cleaning will be required (now standard practice on the KNF). This provision states that all equipment that may harbor noxious weed seeds or plant parts, and will be used off-road for the project, will be pre-cleaned of all dirt and debris.

Any fills, mulches, or revegetation seeding, used during or after project implementation will be certified weed free.

Wildlife

New road construction will be restricted January 1 – July 31 to avoid direct disturbance to breeding bald eagles.

Watershed Health and Fisheries

Best Management Practices (BMPs): BMPs are water quality maintenance and improvement measures developed in compliance with the Clean Water Act, certified by the State Water Resources Control Board and approved by the Environmental Protection Agency. The BMPs appropriate for the proposed action are listed in Appendix B.

Wet Weather Operation Standards (WWOs): WWOs would be applied to protect the transportation system, maintain water quality, and preserve the soil resource. The Wet Weather Operations Standards and Field Guide, revised May 16, 2002, is incorporated by reference and on file in the project record. The WWOs were developed by the Forest, in conjunction with the USFS Pacific Southwest Region and a representative from the North Coast Water Quality Control Board. The standards are intended to provide more specific information to assist field employees in determining when activities are at risk of not meeting BMPs. The goal of the WWOs is to avoid “excessive damage,” which should not occur if the standards are being met. The guidelines would be used to determine if conditions are favorable for wet weather or winter operations, and to provide guidance as to when conditions warrant suspension of operations, when operations may begin or resume, or when and what remedies may be appropriate. Use of native and aggregate surface roads during runoff producing precipitation shall be restricted to reduce sediment production to Orr Lake.

Cultural

Placement of barrier cloth and fill material on the archaeological site at the north end of Orr Lake will follow the conditions listed in Attachment B, II of “First Amended Regional Programmatic Agreement Among the USDA Forest Service, Pacific Southwest Region, California State Historic Preservation Officer, and Advisory Council on Historic Preservation Regarding the Process for Compliance With Section 106 of the National Historic Preservation Act for Undertakings On the National Forests of The Pacific Southwest Region.” The project may

proceed without affecting the site, as long as all construction in the north area is retained within or on the fill material.

Comparison of Alternatives

Table 1 provides comparative summaries of effects associated with the alternatives analyzed in detail.

Table 1. Comparison of Alternatives for the Orr Lake Campground Project.

Comparison factor	Alternative A No Action	Alternative B Proposed Action
Cultural Resources around Orr Lake	The Native American site on the north end of Orr Lake will continue to be eroded by continued human use. Illegal artifact collection and excavation in this area will continue to degrade the site.	Placement of barrier cloth and fill material will protect the north site from soil erosion. The relationship of subsurface site elements and artifacts will be preserved.
Human health & safety at Orr Lake	Unsanitary conditions on the north end will continue to threaten soil and water quality in Orr Lake.	Placement of two vaulted toilets on the north side, one vaulted toilet on the east side, and drinking water at both ends (if possible) will provide a safer human environment at Orr Lake.
Recreation experience at Orr Lake	Lack of toilets continues to inconvenience users. The quality of the site continues to decline as a result of uncontrolled use. There is no disruption of any recreation uses in the area.	Placement of two toilets on the north end (northwest and northeast sides) would provide greater user comfort and convenience. Hardening the site with facility development would improve the quality of the site. Some uses (i.e. camping) may either be temporarily disrupted (closed) or impacted (noise, dust) during construction.
Riparian habitat around Orr Lake	Vehicle and heavy foot traffic around the lake and on the connecting road will continue to negatively impact riparian vegetation.	Riparian vegetation around the lake is expected to reestablish because of the placement and use of proposed fishing platforms and the new connecting road.
Soil erosion around Orr Lake	Vehicle traffic on the existing connecting road will continue to contribute to soil erosion into the lake which negatively impacts fish, and amphibian habitat.	Converting the existing connecting road to a hiking/biking trail and constructing a new road further upslope will reduce soil erosion. The reduction in sediment into Orr Lake will have a beneficial effect on fish and amphibian habitat.

Chapter 3 – Environmental Consequences

This chapter highlights the important effects of implementing each alternative, including direct, indirect and cumulative effects. It also presents the scientific and analytical basis for the comparison of alternatives presented in the alternatives chapter. Under NEPA, an effects discussion for each alternative is focused on effects relative to the significant issues. Because the proposed project has no significant issues, this chapter will discuss the achievement of purpose and need, and effects relative to significance factors.

The planning record includes all project-specific information, including resource reports, and other results of field investigations. The record also contains information resulting from public involvement efforts. The planning record is located at the Supervisor's Office in Yreka, California and is available for review during regular business hours. Information from the record is available upon request.

Achievement of Purpose and Need

How each alternative addresses each aspect of the purpose and need for action at Orr Lake is discussed below.

Alternative A

People will continue to use the north shore of Orr Lake for camping, fishing, and recreating with no sanitation facilities. Over time, unsanitary conditions on the north end may significantly compromise soils and water quality in and around Orr Lake. The desired condition for facilities that cause minimal resource impacts will not be met. Alternative A will not meet the need for sanitary facilities and campsites to be designed to meet health and safety standards.

The archaeological site at the north end will continue to be degraded by illegal artifact collection and disturbed by visitors camping or driving on top of the site. Erosion in this area will continue. Alternative A will not meet the need to protect the archeological site from damage.

The road connecting east and north side camping areas will remain within riparian vegetation and continue to flood seasonally. Rutting and slumping of this road will likely continue and overall road condition will worsen over time. Riparian vegetation on the north, east, and west shores of Orr Lake is subject to heavy foot traffic (mostly for fishing) and uncontrolled vehicle traffic on the east and north sides. The existing connecting road and north end camping areas are eroding at an accelerated rate and delivering sediment to Orr Lake. This will continue to negatively impact fish and amphibian habitat, possibly resulting in dispersal of trout and amphibians from the shoreline areas, and loss of amphibian rearing habitat. Roads within the camping areas and campsite spurs will continue to expand and be modified by traffic, as vehicles are not confined to an established road. Camping, day use, and daily parking will occur throughout the area as in the past. Fishing and boat launching will continue at many locations around the lake. Alternative A will not meet the need to limit use to a sustainable level or develop facilities that cause minimal resource impacts.

Alternative B

Placement of two toilets on the north end, one toilet on the east side, and drinking water faucets at both ends will provide a safer human environment at Orr Lake. The desired condition for facilities that cause minimal resource impacts will be met. Alternative B will meet the need for sanitary facilities and campsites to be designed to meet health and safety standards.

The placement of barrier cloth and fill material over the Native American site on the north end will have a beneficial, protective effect. With the barrier/fill in place, erosion will no longer affect the site, artifacts will no longer illegally be removed, and vehicle use, camping, and/or digging will no longer break artifacts or disturb the relationship of subsurface site elements. Alternative B will meet the need to protect the archeological site from damage and develop facilities that cause minimal resource impacts.

Closing the existing connecting road to motor vehicle use and converting this road to a hiking/biking trail will reduce the amount of sediment currently being transported into the lake as a result of surface runoff. Installation of fishing platforms, trails, and parking barriers will decrease trampling of the riparian vegetation surrounding Orr Lake. Constructing campsites, parking areas, barriers and signs; as well as planting native vegetation will aid in controlling use within the north and east campground areas. Alternative B will meet the need to limit use to a sustainable level and develop facilities that cause minimal resource impacts.

Significance Elements

In 1978, the Council on Environmental Quality disseminated regulations for implementing NEPA. These regulations (40 CFR Parts 1500-1508) include a definition of “significantly” as used in NEPA. The elements of this definition are critical to reducing paperwork through use of a finding of no significant impact when an action will not have a significant effect on the human environment and is, therefore, exempt from requirements to prepare an environmental impact statement. Significant includes consideration of both context and intensity. These elements are addressed here in relation to the action alternatives.

Context. *This means that the significance of an action must be analyzed in several contexts, such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting...in the case of a site-specific action; significance usually depends upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.*

In a local, regional, national, and human context the proposed project does not pose any significant short- or long-term negative effects. Resource protection measures included in these alternatives avoid adverse impacts to the extent that all impacts are within accepted levels. Proposed activities are consistent with all S&Gs in the Forest Plan.

Protecting a known cultural resource site, providing a safer human environment for the visitors of Orr Lake, and enhancing wildlife and fisheries habitat in and around this unique 80-acre lake are potential beneficial effects to the environment as a result of the proposed project. It is expected that everyone who visits Orr Lake will enjoy these beneficial effects.

Approximately 3.5 acres will be affected by placement of the barrier cloth and fill, about 1 acre of road will be decommissioned, and less than 0.5 acre of new road will be constructed. Installing the toilets will take up to 2 days, and the rest of the proposed recreation developments will take about 2-3 months to complete. New road construction will occur in the late summer or fall (after July 31), and the remaining work will occur in the spring and summer months.

Intensity. *This refers to the severity of impact. The following will be considered in evaluating intensity:*

(1) Impacts may be both beneficial and adverse. A significant effect may exist even if, on balance, effects are believed to be beneficial.

The proposed action involves many beneficial effects to human health and safety, and cultural and natural resources at Orr Lake. Potential beneficial effects to the natural environment due to this project include protecting riparian habitat from intense human use, protecting cultural resources from destruction, and providing a more sanitary human environment at Orr Lake. Slight amounts of sediment may be temporarily generated during construction of the proposed fishing platforms, but with implementation of BMPs and WWOs the effects will be short-lived and negligible. There will be no loss of spawning habitat for resident fish as a result of this project. Some displacement of rainbow trout, amphibians, and Western Pond Turtle may occur during construction and installation of the fishing platforms. Any displacement would be temporary in nature, and aquatic species will return to these areas shortly after the work is completed.

There would be no effect or only minor effects that do not limit the ability to breed, feed, or shelter for all other listed or special interest wildlife species.

(2) The degree of effects on public health or safety.

The proposed action will have a beneficial effect on public health and safety at Orr Lake. Placement of three toilets (one on east side and two on north end) and a barrier cloth and fill on the north end will protect visitors from unsanitary conditions that have resulted from uncontrolled use. A standard dust abatement clause will be included in the construction contract to avoid effects to air quality during construction.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The project area contains cultural resources, wetlands, and riparian areas, which will be protected as a result of the proposed action.

(4) The degree of controversy over environmental effects.

Legitimate controversy must be based on credible scientific evidence. Public involvement efforts (refer to Chapter 1, Public Involvement, Coordination, and Consultation) have not revealed any significant controversies regarding the environmental effects of this proposal or its alternatives.

(5) The degree to which the possible effects on the human environment is highly uncertain or involves unique or unknown risks.

The proposed action was designed to achieve objectives identified in the Forest Plan. Project design features and resource protection measures minimize potential adverse resource effects. Years of local expertise with these types of projects minimize the chance of highly uncertain effects or effects which involve unique or unknown risks.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Due to the routine nature of the proposed action, no precedent would be set for future decisions with significant effects. Any future decisions would need to consider all relevant scientific and site-specific information available at that time.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

There are no other actions planned or foreseeable in the project area that might cumulate with the effects of the proposed action. The proposed action does not have the potential to result in cumulatively significant environmental impacts when related to other land management activities that occur around a recreational lake such as Orr Lake.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The proposed action will protect a known cultural resource at Orr Lake, preserving the eligibility of this site for listing in the National Register of Historic Places.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The proposed project will not jeopardize the continued existence of any fish, wildlife, or plant species potentially affected by this project and protected under the Endangered Species Act.

Fish – There are no federally listed or anadromous fish populations, critical habitat, or essential fish habitat in the analysis area, thus no key watersheds. Therefore, there are no direct, indirect or cumulative effects to fish protected under the Endangered Species Act and their habitat.

Wildlife – The bald eagle (*H. leucocephalus*) is the only federally listed wildlife species expected to occur in the analysis area. With use of a limited operating period for new road construction, there will be no affect to bald eagles as a result of the Orr Lake Recreation Development.

Plants – No Threatened or Endangered plants were found, and none are expected to occur within this project area. Therefore, Alternatives A and B of the Orr Lake Recreation Development Project will have no effects on federally listed Threatened or Endangered plant species.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The proposed action does not threaten a violation of Federal, State, or local environmental protection laws. As discussed throughout the EA and supporting documents, the proposed action

is consistent with the Forest Plan, the National Environmental Policy Act, National Forest Management Act, the Clean Water Act, the Clean Air Act, the Endangered Species Act, the National Historic Preservation Act, the Federal Highway Safety Act, and the California Porter Cologne Water Quality Act, and Executive Order 12898.

The National Forest Management Act requires projects to be found consistent with minimum specific management requirements as provided in the implementing regulations at 36 CFR 219.27. Resource Protection 219.27(a), Riparian Areas 219.27(e), Soil and Water 219.27(f), and Diversity 219.27(g) are addressed throughout the EA discussions. Vegetative Manipulation 219.27(b) includes the planting of native vegetation to benefit water quality, and fish and wildlife habitat. Silvicultural Practices 219.27(c) and Even-Aged Management 219.27(d) do not apply as no timber harvesting is proposed.

Forestwide S&G 8-21 of the Forest Plan requires an analysis of project effects on the habitat of Management Indicator Species (MIS). River/Stream, Marsh/Lake/Pond, and Mature Ponderosa Pine species associations were selected for analysis, based on the presence of habitat that may be affected by the proposed action. The MIS analysis is located in the project file.

Executive Order 12898 relating to Environmental Justice requires an assessment of whether there would be disproportionate effects to minority or low-income populations. Low-income people visiting Orr Lake and living in the area will not be disproportionately affected by this project as there will not be any effect on cultural properties and access would not be changed in the action alternative.

Chapter 4 – Consultation and Coordination

The Forest Service consulted the following during the development of this environmental assessment:

ID TEAM MEMBERS

Bob Talley	Team Leader, Landscape Architect
Bobbie DiMonte	Wildlife Biologist, Writer-Editor
Kim Earll	Botanist
Jeannie Goetz	Archaeologist
John Hitchcock	Archaeologist
Jim Stout	Resource Officer
Brian Thomas	Fisheries Biologist
Laura Allen	District Ranger

FEDERAL, STATE, AND LOCAL AGENCIES

California Department of Fish and Game

U.S. Fish and Wildlife Service

NON-PROFIT ORGANIZATIONS

Ducks Unlimited

Rocky Mountain Elk Foundation

TRIBES

Klamath Tribes

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