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Environmental Assessment

Gull Point Boat Ramps Improvement Project

Bend-Ft. Rock Ranger District, Deschutes National Forest
Deschutes County, Oregon

T. 21 S., R. 8 E.

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INTRODUCTION

The Bend-Ft. Rock Ranger District of the Deschutes National Forest has analyzed the environmental effects of proposed recreational improvements at a Forest Service developed recreation site at Wickiup Reservoir within this Environmental Assessment (EA). The project would include the reconstruction of the existing Forest Service boat ramps (Figures 2 through 4) and the improvement of the associated parking areas. These Forest Service facilities are located within and adjacent to Gull Point Campground.

The proposal was designed with the intent to improve recreation facilities (boating) and experiences at these two boat ramps. Implementation will include the removal of less than an approximate acre of vegetation, new pavement and ramp ways and fill at the Gull Point boat ramp to meet specification for boat launching.

The project area is approximately 5 acres and is located southwest of the urban growth boundary of Bend, Oregon within the Northwest Forest Plan boundaries adjacent to Wickiup Reservoir in T. 21 S., R. 8 E. The boat ramps are within and adjacent to Gull Point Campground. There are no inventoried (RARE II) roadless areas or known Threatened or Endangered species in the project area. There is a bald eagle nesting site approximately 0.5 miles from the project site.

Figure 1: Locator map for the Gull Point Boat Ramps project.

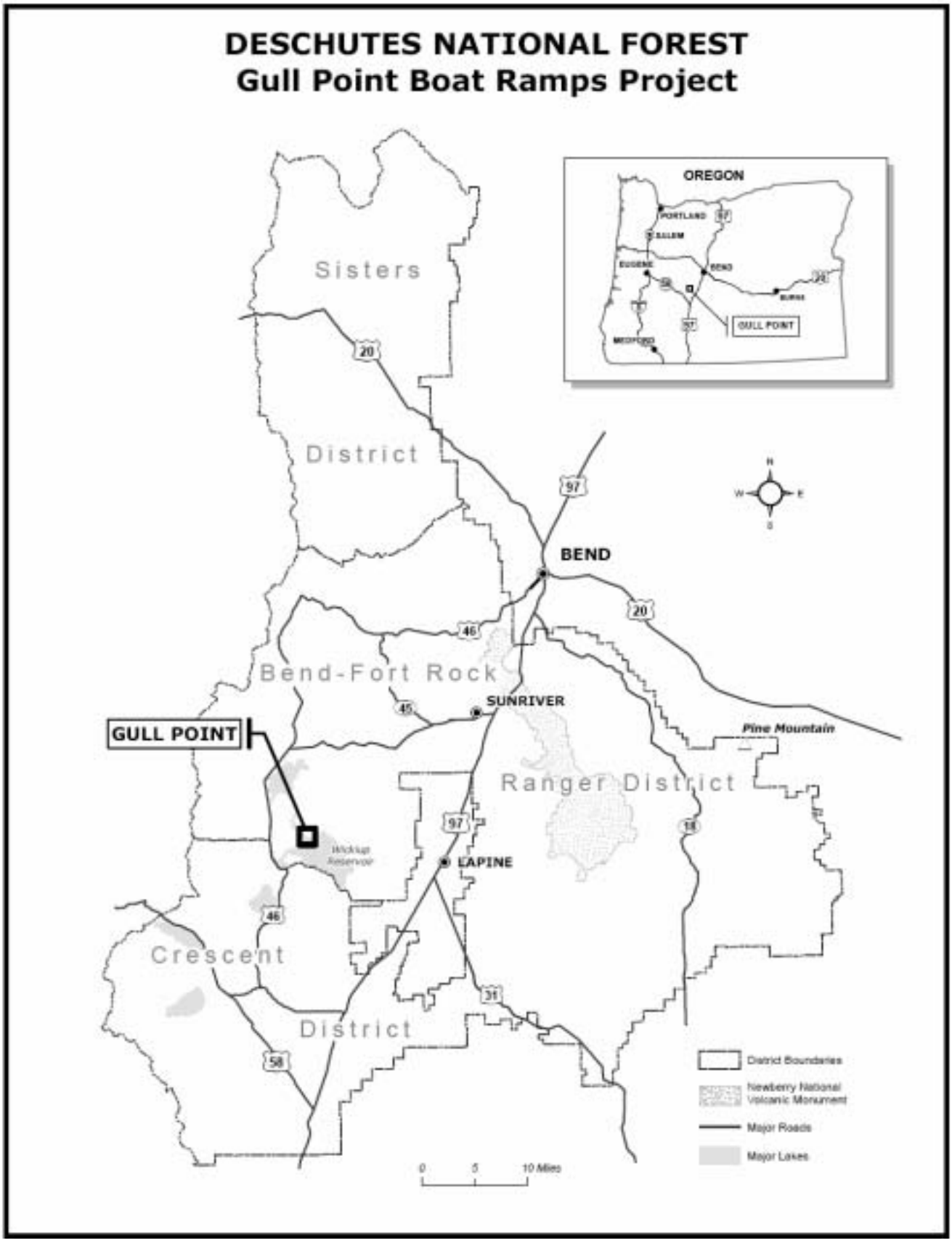


Figure 2: Existing schematic of Gull Point Campground boat ramp.

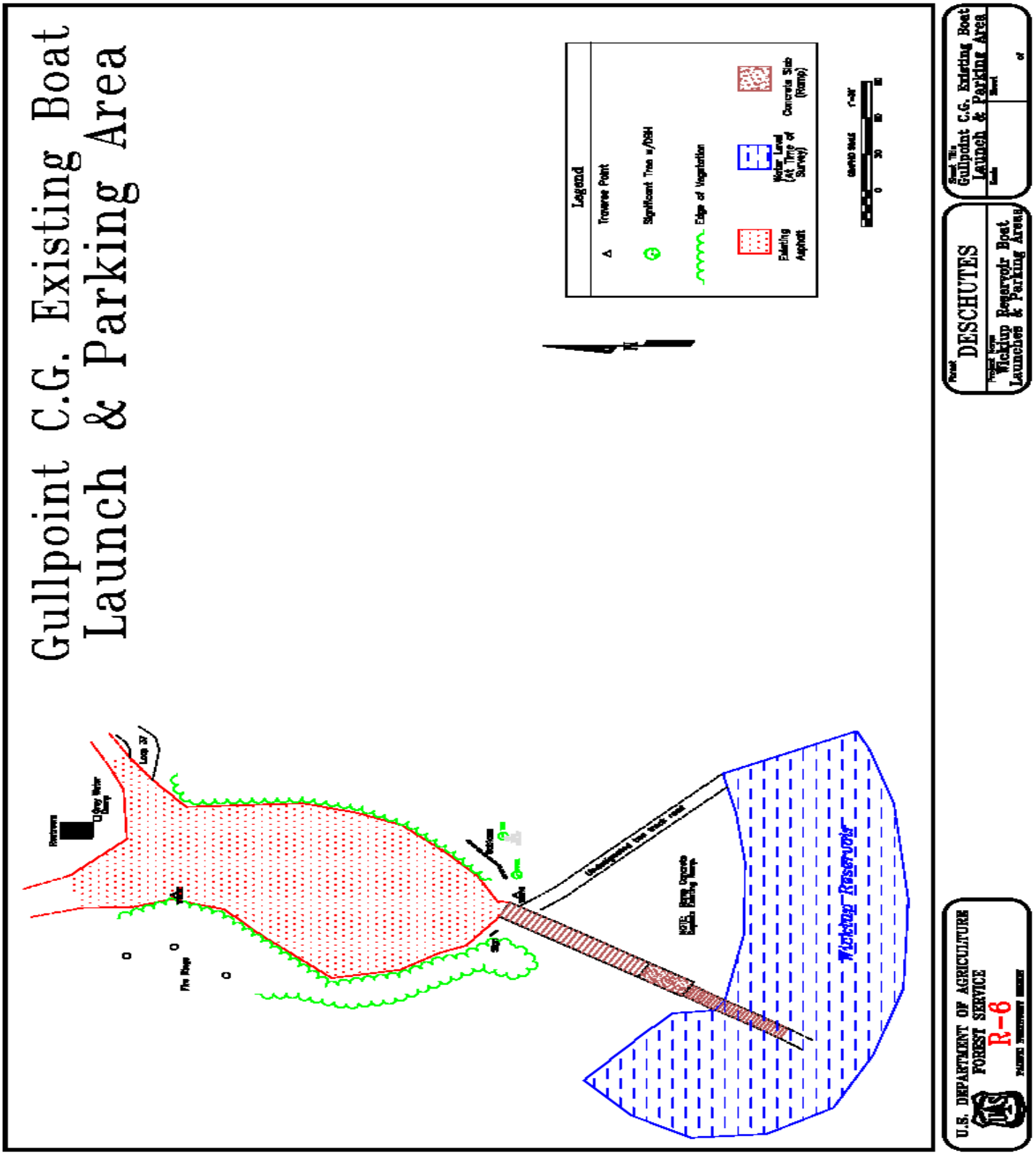
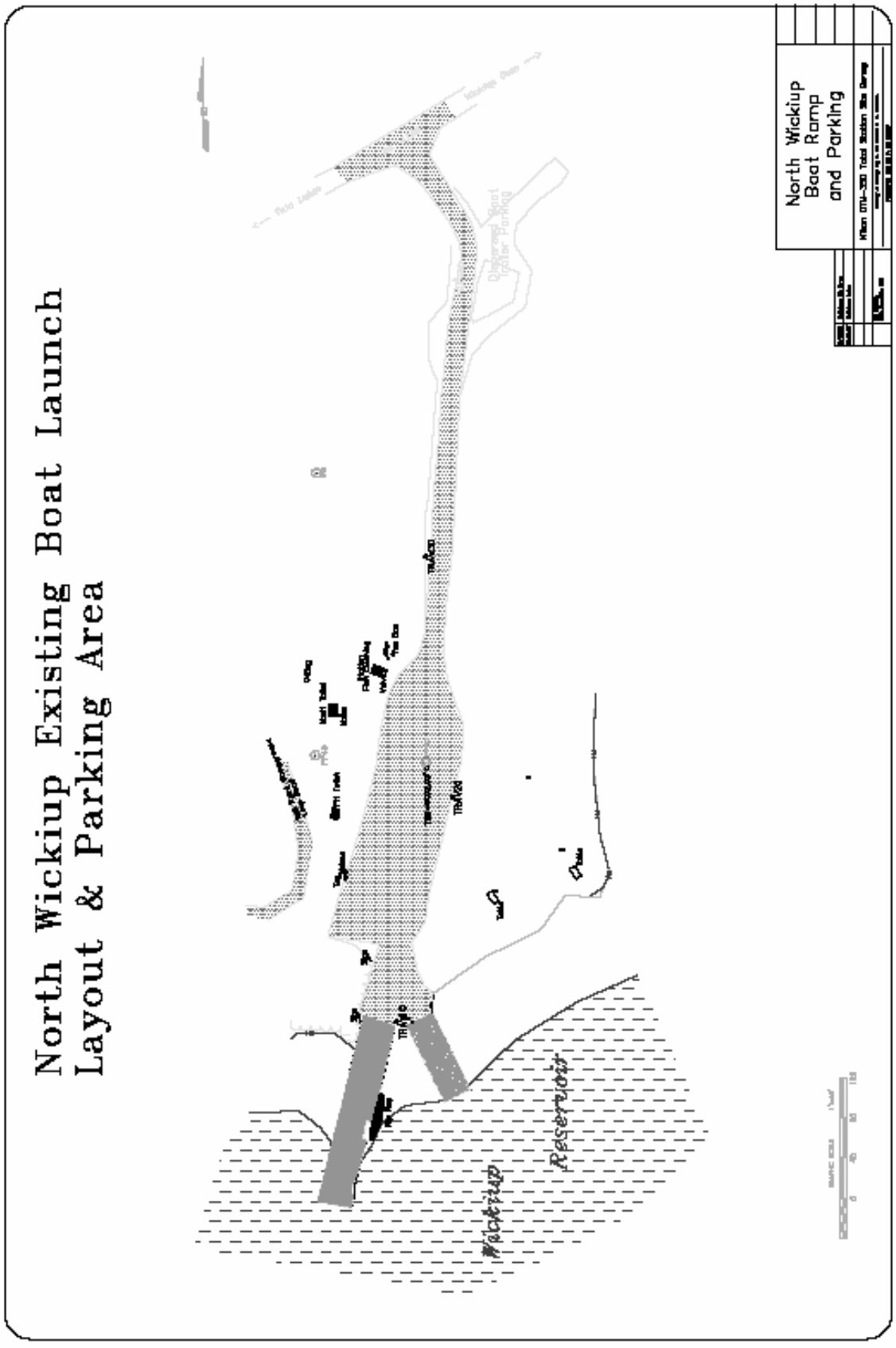


Figure 3: Existing schematic of North Wickiup boat ramp.



MANAGEMENT DIRECTION

The Deschutes National Forest Land and Resource Management Plan (Forest Plan), 1990, as amended by the Northwest Forest Plan (NWFP), 1994, established broad direction for the Forest. The analysis conducted for this project tiers to the Final Environmental Impact Statement for the Forest Plan and its supporting documentation.

The following is a summary of the Management Allocations (MA) associated with the project area as allocated in the Deschutes National Forest Land and Resource Management Plan (Forest Plan):

- Intensive Recreation (MA11) – To provide a wide variety of quality outdoor recreation opportunities within a Forest environment where the localized settings may be modified to accommodate large numbers of visitors. (LRMP 4-135)

The following are summaries of designations of the Northwest Forest Plan associated with the project areas:

- Riparian Reserve – As part of the Northwest Forest Plan's Aquatic Conservation Strategy, Riparian Reserves are lands along streams and unstable and potentially unstable areas where special standards and guidelines direct land use. The objective is to restore and maintain the health of watersheds and the aquatic ecosystems they contain. Riparian Reserves overlap the Management Allocations listed above. (NWFP B-12)
- Administratively Withdrawn – Administratively Withdrawn areas are identified in current Forest Plans and include recreation and visual areas, and other areas where management emphasis precludes scheduled timber harvest and which are not included in calculations of allowable sale quantity (NWFP C-19). In the current project area, the Intensive Recreation MA under the LRMP is considered Administratively Withdrawn.

PURPOSE AND NEED AND PROPOSED ACTION

Management activities that are proposed within the planning area are guided by the strategic framework of the Deschutes National Forest Land and Resource Management Plan (USDA 1990) (Forest Plan) and subsequent amendments to that plan (most notably the Northwest Forest Plan). These plans establish desired conditions for specific resources; Management Areas within the Forest, standards and guidelines by which activities must be conducted; and general objectives for goods and services that are expected to result from these activities. These desired conditions, refined by actual site conditions and compared to the existing forest conditions, form the basis for the need to take action. Proposed actions are designed to promote these desired conditions.

The purpose of this project is to improve recreation infrastructure, public safety and satisfaction. The proposed actions are intended to improve the boat ramps at Gull Point and North Wickiup boat ramps. The existing ramps do not meet current design standards for safety and usability. Presently only one of the ramps is useable during the low water level portions of the summer season. Neither ramp meets ADA accessibility standards. Also, ramps and parking area are in poor condition and pose a safety concern to the recreating public. Both have broken and un-level pavement, making an uneven surface for vehicles and for pedestrians. These conditions can lead to trailers scraping during launch, and are also tripping hazards for pedestrians.

Additionally, parking is inadequate for current levels of use, especially during weekends and holidays. As such, during busy times, the public has to park on the access road (Forest Road 4260), which creates additional safety issues.

Wickiup Reservoir had the 9th highest level of usage among Oregon's reservoirs and lakes in 2001 according to State Marine Board records. The Gull Point boat ramp supported 50% of the known use at the reservoir in 2001. (Oregon State Marine Board 2002 Triennial Survey)

This project would provide additional parking and replace the existing ramps with ramps designed to provide safe boat launching facilities to area boaters through a wide range of reservoir water elevations. The new ramps will have boarding floats for safer accessibility. Upgrades to North Wickiup boat ramp will help disperse the use more evenly while increasing boater safety.

DECISION TO BE MADE

The Deciding Officer is the Bend/Fort Rock District Ranger. The District Ranger will determine whether the selected alternative may have a significant effect on the quality of the human environment and whether an environmental impact statement needs to be prepared in accordance with the requirements of the National Environmental Policy Act.

Specialist reports used in the preparation of this environmental assessment are on file at the Bend/Fort Rock Ranger District office.

PUBLIC INVOLVEMENT - SCOPING PROCESS USED

Announcement of the proposed project was included in the Central Oregon Schedule of Projects in the 2007 spring and all subsequent editions. This notification, through quarterly mailings, reaches approximately 90 interested individuals and groups; and is also posted on the internet (Deschutes National Forest home page). A Forest Service letter requesting public involvement was provided in May 2007 to approximately 100 individuals, businesses, and organizations that have expressed an interest in the project development process. Included in the mailing was The Bulletin, the local newspaper that reported on the original Proposed Actions. The scoping letter was also placed on the United States Forest Service (USFS) web site.

Two responses were received; both were in favor of the project proposal.

ISSUES USED IN ALTERNATIVE DESIGN

Comments provided as described above were assessed to determine whether they were relevant to the proposed action and suggested reasonable alternatives to the proposed action or additional information for the Responsible Official to consider. As such, there were no external issues identified for this project. Therefore, the no action and the proposed action are the only alternatives that will be considered.

ALTERNATIVE DISCUSSION

This section provides discussion of a no action alternative and the proposed action. This section presents a detailed description of the alternatives responding to the "Purpose and Need" that are considered to be

reasonable and viable by the Decision Maker (Bend-Fort Rock District Ranger). The proposed action is designed to move towards the desired condition and be consistent with the standards and guidelines of the Forest Plan.

Alternative 1 (No Action)

Forest Service boat ramp improvements that would improve the efficiency of boat launch/retrieval, reduce congestion, and reduce damage to Forest user's boats and trailers would not be implemented. The present boat ramps would continue to deteriorate, cause damage to boats, trailers, and vehicles, and continue to be a safety concern. Long lines of boaters waiting to launch/retrieve boats would continue during peak periods of use. Associated parking improvements that would improve parking efficiency would not be implemented. Utilizing parking potential to reduce congestion and haphazard parking in parking areas and access roads would not occur. Safety concerns with line-of-sight and parking along access roads would continue.

Alternative 2 (Proposed Action)

There are two boat launches on the north of Wickiup Reservoir. One is within Gull Point Campground that has one ramp; the other is at North Wickiup Boat Launch, which has two ramps. These sites are identified in the Browns/Wickiup Watershed Analysis (Chapters 3 & 4, p. 73) and were identified as being in fair condition. It was recommended in this analysis to improve the recreation facilities at these sites. (Chapter 6-10)

Gull Point Boat Ramp The existing ramp does not meet current design standards for safety and usability. The ramp is extremely long and narrow and poses a threat to the safety of the boating public. Additionally, the launching facilities are not ADA accessible (Americans With Disabilities Act). This project would replace the existing ramp designed to provide safe boat launching facilities for boaters during a wide range of reservoir elevations. The new ramp would have boarding floats for safer accessibility of users.

Also, the present ramp is not adequate for present use levels. Wickiup Reservoir had the 9th highest level of use among Oregon's reservoirs and lakes in 2001. This ramp supported 50% of the known use at the reservoir in 2001 (Oregon State Marine Board Triennial Survey).

The existing boat ramp is in poor condition, with at Gull Point (approximately 12.5' x 150') will be replaced with large fill with dimensions of approximately 50' x 100' (paved jetty), and construction at the end of the jetty of a single lane concrete ramp.

Removal of the existing boat ramp will require excavation of 31 cubic yards (CY) of concrete below the high water mark. An additional 75 CY of native material will be removed above the high water mark. Fill activities occurring for this boat ramp include the placement of 1,500 CY of borrow material below the high water mark, over the existing location to construct a jetty for the purpose of meeting slope requirements of the new ramp. Also, 700 CY of riprap will be placed around the jetty and edges of the ramp for erosion control. Another 40 CY of aggregate will be placed to a depth of 6 inches to establish the proper slope of the replacement ramp below the high water mark. An additional 95 CY of rock, 2 CY of cast-in-place concrete and 120 CY of riprap will be placed above the high water mark to complete the toe of the ramp and protection around the top of the jetty. Another 30 CY of asphalt will be placed on top of the jetty, above the high water mark, for safer and easier access to the ramp. All concrete

poured below the high water mark will occur during the period when the reservoir is drawn down, or be pre-cast to ensure the concrete is fully cured before it comes in contact with the water.

North Wickiup Boat Ramp The existing ramps does not meet current design standards for safety and usability. Currently, only one of the ramps is usable at lower reservoir levels. Neither ramp is ADA accessible. Additionally, parking is not adequate for current use levels. During peak periods in the summer season, the public must park along the access road to the site (Road 4260) as the existing parking area is overflowing. This creates additional safety concerns with lack of site distance for motor vehicles and pedestrians, as well as impacting vegetation along the roadside. This project would provide additional parking and replace the existing ramps with a ramp designed to provide safe boat launching facilities during a wide range of reservoir elevations. The new ramp would have boarding floats for safer accessibility of users.

Also, the present ramp is not adequate for present use levels. Wickiup Reservoir had the 9th highest level of use among Oregon's reservoirs and lakes in 2001. This ramp supported 50% of the known use at the reservoir in 2001 (Oregon State Marine Board Triennial Survey).

The existing low water boat ramp (approximately 32' x 190') will be replaced with a 45.5' x 290' two lane public boat ramp, 220 lineal feet of which occurs below the high water mark.

Removal of the existing boat ramps will require excavation of 76 CY of asphalt concrete, 33 CY of concrete and 50 CY of material below the high water mark. An additional 36 CY of asphalt and 11 CY of concrete and 50 CY of material will be placed below the high water mark. Fill involved is 170 CY of concrete, 154 CY of riprap and 140 CY of crushed rock will be below the high water mark. There will also be 60 CY of concrete, 68 CY of riprap and 48 CY of crushed rock to be used as fill above the high water mark.

Figure 4: Proposed schematic of Gull Point Campground boat ramp.

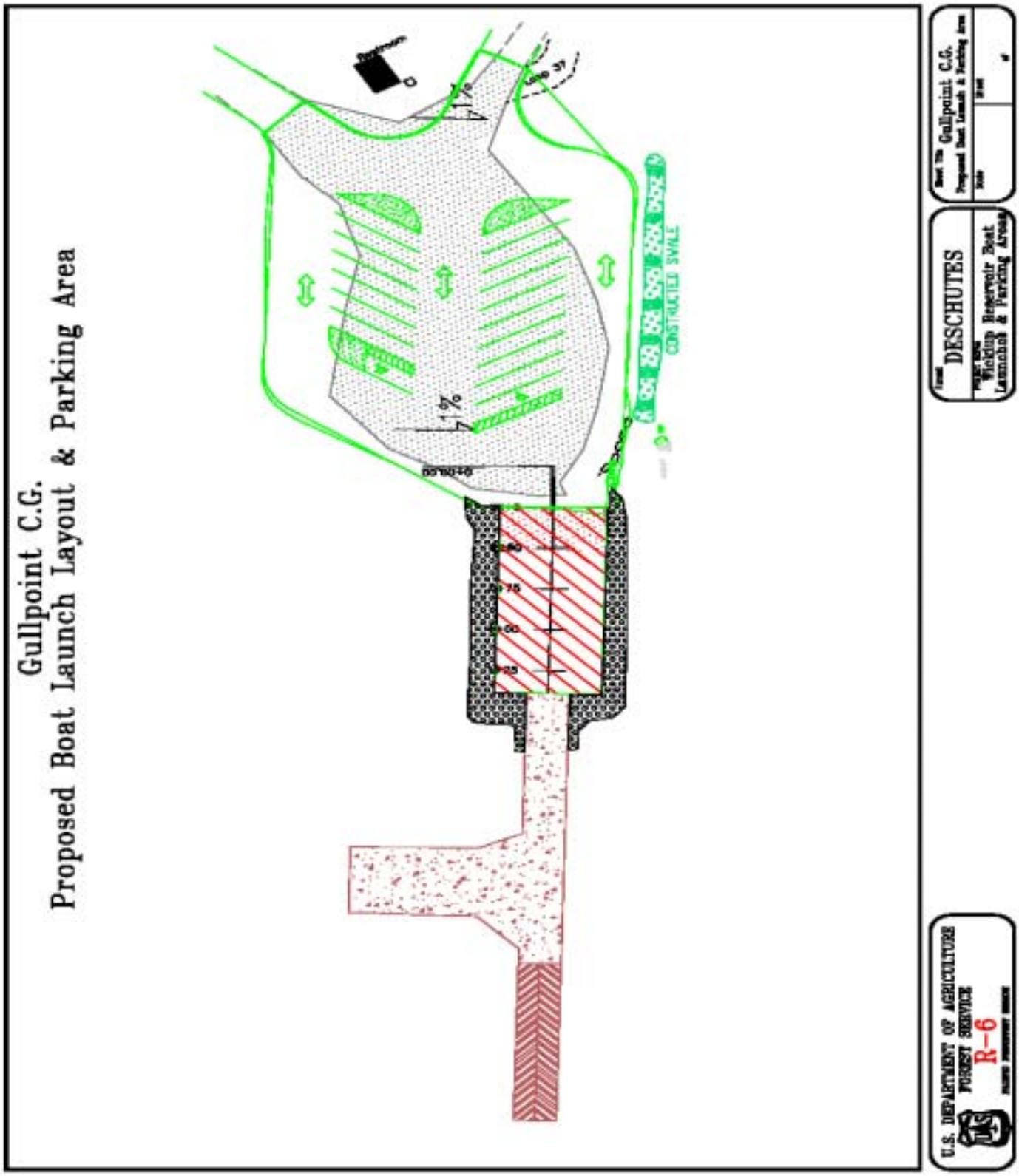
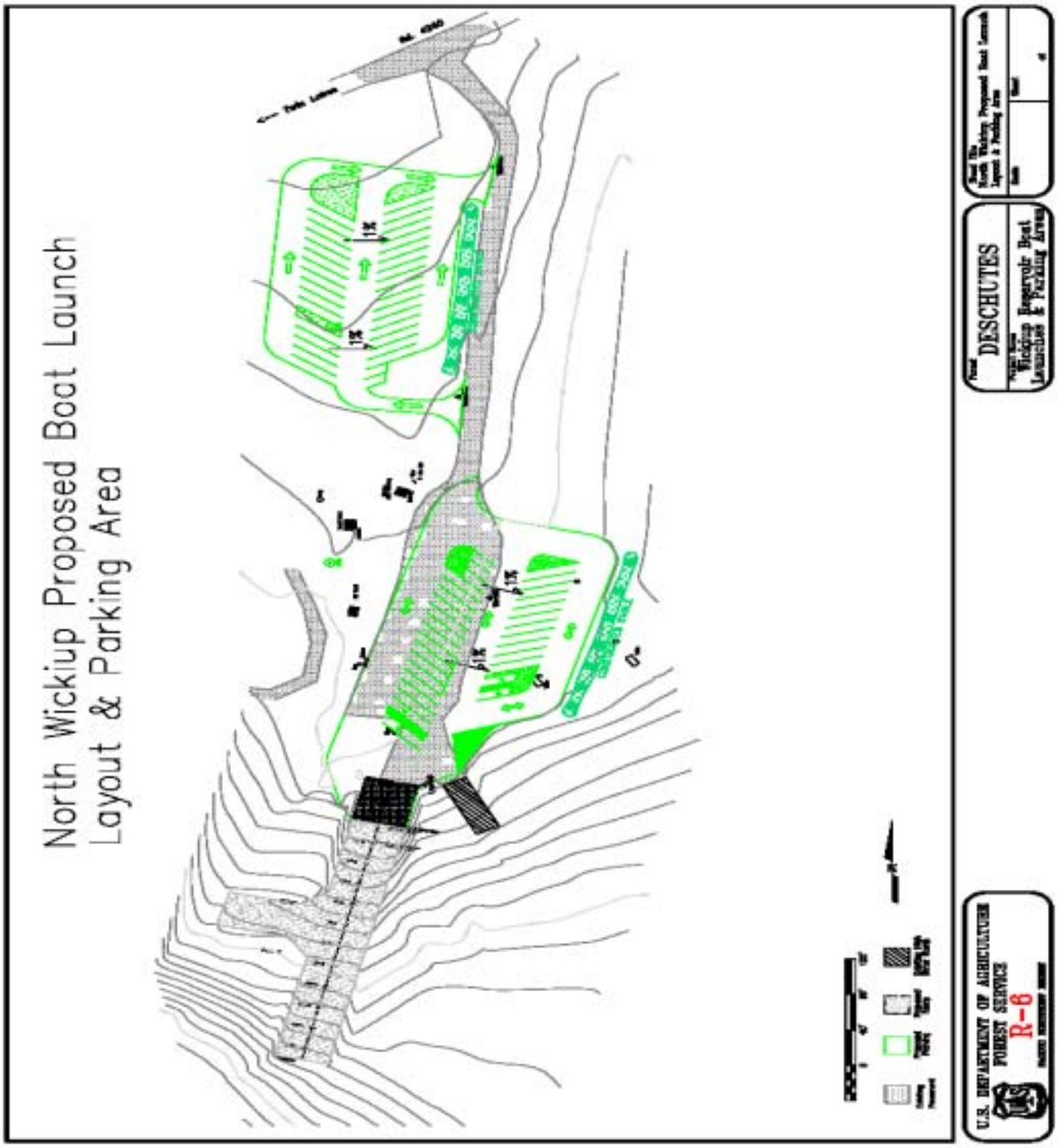


Figure 5: Proposed schematic of North Wickiup Campground boat ramp.



Alternative Comparison

Table 1 compares the alternatives in relation to the activities proposed in Alternatives 1 and 1. All measurements are approximate.

Table 1: Alternative Comparison

Activity	Alternative 1 (No Action & Current Condition)	Alternative 2 (Proposed Action)
Boat Ramp		
Number of Concrete Boat Ramps	3	4
Total Square Feet of Boat Ramps	6,000-6,500 SQ. FT-Gullpoint 7,000-8,000 SQ. FT-N. Wickiup	6,200-6,800 SQ. FT. – Gullpoint 10,000-12,000 SQ. FT-N. Wickiup
Dock		
Access (Sides)	0	0
Pilings	0	2-@ N.Wickiup
Dredging	0	0
Parking		
Designed Parking – Gull Point		
Vehicles with Trailer Spaces	10-15	15-20
Single Vehicle Spaces	0	1
Designed Parking – North Wickiup		
Vehicles with Trailer Spaces	15-20	50-60
Single Vehicle Spaces	0	5-10
Paving		
Road Distance (miles)	500ft-700ft	500ft-700ft
Gull Point Parking	Approx. 24,700 SQ. FT.	Approx. 36,500 SQ. FT.
North Wickiup Parking	Approx. 24,800 SQ. FT.	Approx. 45,800 SQ. FT.
Acres Affected		
Gull Point	0	.20 - .30 Acres
North Wickiup	0	.45 - .55 Acres

MITIGATION MEASURES & PROJECT DESIGN CRITERIA COMMON TO ALTERNATIVE 2 (PROPOSED ACTION)

Alternatives are designed to be consistent with the desired condition specified in the Deschutes National Forest Land and Resource Management Plan (Forest Plan, LRMP) and the standards and guidelines and the Northwest Forest Plan. The following measures would be applied to reduce potential adverse impacts of Alternatives 2 and 3. If implementation or layout problems or opportunities are encountered, the appropriate specialist will be consulted.

Fisheries

The following BMP mitigation measures applicable to the proposed project are found in General Water Quality Best Management Practices, Pacific Northwest Region, 1988.

1. BMP T-21. Servicing and Refueling of Equipment.
   In summary, service equipment to be used in re-construction of parking lot and boat ramp in areas away from water.
2. BMP W-4 Oil and Hazardous Substance Spill Contingency Plan. In summary, have a contingency plan for emergency spills of fuel or hazardous materials into water bodies.

Wildlife

Project Design Criteria are required LRMP Standards and Guidelines (S&Gs), Northwest Forest Plan standards, or other requirements (e.g. interagency agreements).

Project Design Criteria

PDC #1 - To protect nesting osprey from disturbance and possible nest abandonment, project activities within ¼ of the nest (North Wickiup Boat Ramp) would be seasonally restricted from April 1 – August 31 (WL-3). If nesting has not been confirmed by May 15 or the site is unoccupied by this time, the project may proceed as planned. If the osprey are nesting, monitoring would occur towards the end of the period, and project activities could begin as soon as the young are fledged.

PDC #2 - Any active raptor nest found during management of both ramps activities would be protected from disturbing activities within ¼ mile (l mile for the use of explosives or activities associated with the rock breaker) of the nest by restricting site disturbing operations during the following periods:

Northern goshawk	*March1 – August 31 (WL-3)*
Cooper's hawk	*April 15 – August 31 (WL-19)*
Sharp-shinned hawk	*April 15 – August 31 (WL-19)*
Red-tailed hawk	*March 1 – August 31 (WL-3)*
Golden Eagle	*January 1 – August 31 (WL-3)*
Osprey	*April 1 – August 32 (WL-3)*
Great gray owl	*March 1 – June 30 (WL-33)*

PDC#3 - To prevent negative impacts at both boat ramps to nesting bald eagles, activities that would utilize rock breaker machinery would be seasonally restricted from January 1 to August 31 (M3-15).

Recommendations

R #1 - To avoid potential nest abandonment, nest destruction, and loss of broods for the bufflehead within or immediately adjacent to the project area, do not conduct green tree harvest during the period April 1-August 15. Implement treatments where possible during fall, winter, and early spring (September through March). If the specified restriction period must be compromised, project activity at the beginning of the period (within the first month) would be considered. The activity from this project that would have the most impact on these birds would be the actual logging of the trees. If this activity could be done during these time periods, impacts such as disturbance and abandonment of nests or even nest destruction would be reduced.

R #2 - To avoid potential nest abandonment, nest destruction, and loss of broods for woodpeckers, cavity nesters, focal bird species, and waterfowl within or immediately adjacent to the project area, do not conduct project activities at either boat ramp during the period April 1 – August 15. Implement treatment where possible during the fall, winter, and early spring (September through March). If the specified restriction period must be compromised, project activity at the beginning of the period (within the first month) would be considered. The activity from this project that would have the most impact on these birds would be the actual logging of the trees and removal of shrubs/grading the areas for parking. If these activities could be done during these time periods, impacts such as disturbance and abandonment of nests or even nest destruction would be reduced.

Botany

1. Clean all equipment before entering *and after leaving* National Forest System lands. Remove mud, dirt, and plant parts from project equipment before moving it into the project area and before proceeding to the next project.
2. The district botanist or her representative will inspect any gravel or fill material that is brought into the project for the presence of noxious weeds.

Recommendations

1. Monitor the area for noxious weeds annually, if possible, after the project ends. If any noxious weeds are found they should be removed.

Scenery

1. Plant native shrub and grass species to soften any effect following construction. Reduce soil and color contrast by completely covering up impacted area with native materials such as pine needle casting, local topsoil of similar color, or bark mulch on impacted area following construction completion. Plant native species of trees to provide a visual buffer between Cultus Lake and the parking areas.
2. Treatment of slash and tree stump (following timber removal) shall comply with the Deschutes National Forest LRMP standards and guidelines, including rehabilitation of impacted area.
3. Following the reconstruction, remove all rejected materials off site so to maintain the original site condition as much as possible, as part of overall site rehabilitation effort.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section discloses the expected environmental consequences as a result of implementation of the alternatives: Alternative 1 (No Action) or Alternative 2 (Proposed Action). The two action alternatives are designed to be consistent with the desired conditions specified in the Forest Plan (LRMP) standards and guidelines, along with direction found in the Northwest Forest Plan.

This section provides the scientific and analytic basis for comparison of the alternatives. It also describes duration and intensity of effects of the alternatives. All measurements are approximate.

Recreation Resource

Affected Environment: Wickiup Reservoir has a long history of various recreational use. Included are boating, camping, and day use. Though the opening of fishing season draws high numbers of anlgers to Wickiuip at the end of April, the general season for recreation use is Memorial Day through Labor Day, with the highest use occurring between July 4 and Labor Day. During the high use season, campgrounds and day use facilities may be near or above capacity. Summer days are generally warm and dry and nightime may experience frost. The access road to the Forest Service facilities is usually snow-free from mid May to mid November. Heavy snows during the winter season make use impractical.

The Forest Service boat ramp and parking area were developed during the 1960s and are maintained and operated by the Forest Service in partnership with the Oregon State Marine Board (OSMB). Like many other boating sites in Oregon, the boat ramp and parking areas have reached the end of the effective, functional life span. The OSMB estimates that three out of every four boating facilities throughout the state do not meet the current standards for safety and serviceability. Wickiup Reservoir had the 9th highest level of boat usage among Oregon's reservoirs and lakes and the highest level of usage in Deschutes County in 2001, with the Gull Point ramp supporting 50% of the known use at the reservoir (Oregon State Marine Board 2002 Triennial Survey). Fishing accounted for almost 96% of the boat usage on the reservoir.

The boat ramps are poorly designed for modern boats and trailers and are in a deteriorating condition. The beginning of the ramps has a sudden slope change and ramp breakage is occurring at the water end as a result of the loss of base material from propeller wash and natural processes. The loss of ramp at the water end is also associated with an abrupt drop off which makes boat launching and loading difficult, particularly in autumn when the water is generally at the lowest level. Both the change in ramp slope and ramp breakage with the sharp drop off has caused damage to boat trailers. In addition, the accumulation of sediment (displacement from propeller wash) is an impediment for boats leaving the launch area for open water.

The associated parking areas, which allow for approximately 10 to 15 or 15 to 20 vehicles (Gull Point and North Wickiup respectively), are not accommodating, especially for those vehicles with trailers. Due to parking not being well defined, the parking areas are frequently congested with overflow vehicles parked along the access road and in other undesignated areas. Vegetation within the parking area, in conjunction with vehicle congestion, interferes with a safe line-of-sight for the driver. It is common to observe a long line of boaters waiting for an opportunity to launch or load their boats at the ramps during busy weekends, especially North Wickiup.

Alternative 1 (No Action): With this alternative, there would be no reconstruction activities at either boat ramp facilities except for routine maintenance of existing facilities (i.e. toilets and sign boards). This alternative would perpetuate the congestion and haphazard activities associated with boat launch/retrieval and parking. The continued use of the present boat ramp facilities would continue: 1) causing damage to boat trailers; 2) inefficient launching and retrieval of boats; 3) difficulty in launching and retrieving boats, particularly during late summer, low water periods; and 4) deterioration of the boat ramp. Current parking facilities would have a continuation of the inefficient use of the areas for parking and would continue to present safety and resource damage concerns.

Alternative 2 (Proposed Action): This alternative would improve the boat ramp configuration. New base material and an improved ramp design would allow the ramp to better withstand wave wash and weather and provide a more efficient platform for vehicles and trailers. Redesigning the parking areas with defined parking would reduce the current problem of haphazard, unsafe parking conditions. Tree removal in the north portion of the parking area would allow for more efficient parking and would reduce likely hazards associated with trees and parking areas. Redesigning the parking areas with defined parking would reduce the current problem of haphazard, unsafe parking conditions.

The Gull Point parking area would be designed to accommodate approximately 15-20 spaces for vehicles with trailers, while North Wickiup would be approximately 50-60 for vehicles with trailers and another 5-10 for single vehicles. This would reduce the current problem of haphazard, unsafe parking conditions. Overflow parking would likely continue. Overall traffic flow would be improved with both parking areas.

Fisheries Resource

Affected Environment: Wickiup Reservoir, completed in 1949, is approximately 11,000 surface acres and has a volume of 200,000 acre feet when at capacity and contains a variety of game fish species, including rainbow trout, redband trout, brown trout, brook trout, kokanee salmon, coho salmon, and mountain whitefish. The Deschutes River channel of Wickiup Reservoir is located adjacent to the two boat ramps. In a typical year, the reservoir is drawn down to approximately ¼ capacity to irrigate downriver agricultural developments. This exposes a large amount of the reservoir bottom and decreases the usefulness of the two ramps for launching.

The Aquatic Conservation Strategy was developed to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within them on public lands (NWFP ROD, B-9). This approach seeks to maintain and restore ecosystem health at watershed and landscape scales, prevent further degradation and restore habitats over broad landscapes.

The Browns/Wickiup Watershed Analysis (1997) was consulted for information on watershed and riparian condition. Within the project area, the zone of riparian vegetation surrounding the reservoir is relatively narrow, generally 10 - 30 feet in width, characterized by large willow. The vegetation quickly transitions into upland communities of lodgepole and ponderosa pine overstory with a bitterbrush understory away from the lake.

Alternative 1 (No Action): With no parking area reconstruction, there would be no effects to redband trout, other fish species, fish habitat, or water quality from selecting this alternative. There would be *No Impact* to redband trout.

Alternative 2 (Proposed Action): Construction of the parking lot and swale for drainage would remove trees from approximately .25 acres within the Riparian Reserve of Wickiup Reservoir at the Gull Point ramp, and on approximately 0.5 acres at North Wickiup boat ramp. The construction would occur on essentially flat ground with permeable soil types (Landtype 45 – Deschutes National Forest, 1979).

In summary, the total fill below high water mark for both ramps would be 2,514 cubic yards. This is the net amount after subtracting removal below full pool elevation from fill below full pool elevation. The total acreage within the Riparian Reserves that would be developed for parking lots would total approximately 0.75 acres.

The volume of fill added from construction of both ramps would reduce the capacity of Wickiup Reservoir by 1.56 acre-feet, or .00078% of the 200,000 acre-foot reservoir. The fill material would be larger in diameter than the native materials, which is composed largely of sand and silt. The reduced capacity of the reservoir would not have measurable direct or indirect effects on fish carrying capacity, including that of redband trout. The amount of fill would add cumulatively to the amount of fill that is occurring naturally from deposition of sediments entering the reservoir from tributary erosion processes. The volume entering the reservoir from erosion processes is unknown. The rock and boulder portions of the fill material would improve habitat for fish and fish forage species (aquatic invertebrates), but the benefits to fish, including redband trout, would be minimal.

Disturbance would occur on approximately 0.25 acre of reservoir bottom below the full pool elevation during the removal of old ramps and construction of the new ramps. The disturbance to the reservoir bottom would be on less than .002% of the total bottom area and would not measurably affect fish or the fish prey base, including redband trout, with implementation of mitigation measures. Most of the boat ramp construction site will be dry due to the fall implementation schedule. The new construction would increase development of the shoreline by an additional 23 feet above the original construction dimensions, increasing from 72.5 feet to 95.5 feet. The disturbance to the shoreline would be on less than .006% of the total reservoir shoreline and would not measurably affect fish, the fish forage base, or fish hiding cover, including that of redband trout.

The development within the Riparian Reserve would be .08% of the existing Riparian Reserve of Wickiup Reservoir. This development would add cumulatively to the existing development (approximately 7 acres) within the Riparian Reserve of Wickiup Reservoir, but no measurable adverse effects to fish, fish habitat, including redband trout, or water quality would occur. The removal of trees would not measurably reduce shade due to their distance from the water and the northern aspect of the site. Water temperature would not be affected. Overland flow of sediments from parking lot construction would be minimal. The reservoir would be drawn down during construction. Any sediments entering Wickiup Reservoir would settle out near the entry point and would not affect redband or other fish species spawning areas. Turbidity would increase at the sites during excavation and construction activities, but are expected to return to background levels within 1 hour after equipment ceases work as suspended sediments settle to the reservoir bottom. Fish, including redband trout, would be expected to vacate the immediate vicinity of the site during construction activities but return immediately when activities are not occurring.

Construction of the two boat ramps could have incidental short-term effects (1-3 years) to riparian vegetation immediately adjacent to the project site from ground disturbance, but effects would be limited to a small fraction of the 1,450 acres of riparian vegetation around the reservoir. Any riparian vegetation disturbed during construction is expected to recover within approximately 3 years.

Additional parking space could lead to additional recreational use above current levels. With additional recreational use, there are potentially increased adverse effects to the water/fisheries resources from increased boat motor pollutants and increased foot traffic on shoreline areas. However, increases as a result of this project would not have measurable effects to water quality or fisheries habitat.

The project is consistent with the applicable standards and guidelines from the Northwest Forest Plan (RM 1 and RM 2).

There would be **No Impact** to redband trout as a result of selecting this alternative**.**

Analysis of Effects to the Aquatic Conservation Strategy Objectives:

The Aquatic Conservation Strategy Objectives (ACS) is listed on page B-11 of the Record of Decision for the NWFP. An agency must manage riparian-dependent resources to maintain the existing condition or implement actions to restore conditions (NWFP ROC, B-10). Boat ramp reconstruction will maintain the riparian conditions and therefore meet the intent of the ACS. The following is a summary of how this project compares to each of the ACS objectives (ROD B-11).

ACS Objective 1: Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations and communities are uniquely adapted.

Neither of the alternatives retards or prevent attainment of this objective. The small size of the project site and the associated potential effects are minimal on a watershed scale. The Wickiup 6th field sub-watershed is 26,965 acres. The action alternative would result in new development of less than 1 acre (<.0004% of sub-watershed). Landscape scale aquatic systems are maintained.

ACS Objective 2: Maintain and restore spatial and temporal connectivity within and between watersheds. Lateral, longitudinal, and drainage network connections include flood plains, wetlands, upsweep areas, headwater tributaries, and intact refugia. These network connections must provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species.

Neither of the alternatives retards or prevents attainment of this objective. Connectivity within and between watersheds would not be affected under either alternative. The project area is already within a developed area. The existing condition is providing network connections for fulfilling life history requirements within the 6th field sub-watershed; however the aquatic spatial connectivity between the Wickiup 6th field sub-watershed and the upriver Crane Prairie 6th field sub-watershed is eliminated by the lack of passage at Crane Prairie dam.

ACS Objective 3: Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.

Neither of the alternatives retards or prevents attainment of this objective. Alternative 2 would add just 23 feet of development to the 50.5 miles of shoreline (<.006%). Disturbance to the bottom configurations would occur on approximately 0.25 acre (<.002% of the 11,000 surface acre reservoir) during excavation and construction, but the final footprint of the new ramps would be nearly identical to the existing conditions.

ACS Objective 4: Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.

Neither alternative would retard or prevent attainment of this objective. Water quality would be degraded temporarily due to an increase in turbidity near the boat ramp during dredging and boat ramp construction activities, but mitigation measures would limit the impacts. Most of the excavation and construction would occur in the dry as the reservoir would be drawn down.

ACS Objective 5: Maintain and restore the sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.

Neither alternative would retard or prevent attainment of this objective. Sediments generated during construction of the boat ramps would settle within 1 hour after activities cease and would be stored and transported through natural causes thereafter. Parking lot construction is not anticipated to result in any measurable increases in sediment input as construction will include drainage features and would occur on flat ground.

ACS Objective 6: Maintain and restore in-stream flows sufficient to create and restore riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration and spatial distribution of peak, high, and low flows must be protected.

Neither of the alternatives retards or prevents attainment of this objective. In-stream flows are not affected by any of the alternatives.

ACS Objective 7: Maintain and restore timing, variability, and duration of flood plain inundation and water table elevation in meadows and wetlands.

Neither of the alternatives retards or prevents attainment of this objective. There would be no effects to floodplain inundation or wetland and meadow water tables under either alternative.

ACS Objective 8: Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distribution of coarse woody debris sufficient to sustain physical complexity and stability.

Neither of the alternatives retards or prevents attainment of this objective. There is no development of riparian areas under the action alternative. The species composition and structural diversity of plant communities are maintained. Under the existing condition, some riparian vegetation has been impacted from the construction of the existing boat ramp and foot traffic along the shoreline. The width of the riparian vegetation zone varies along the reservoir, but consists of scattered willow and sedges at the two project sites. The species composition and structural diversity is maintained when put in context of the entire lake, which has 50.5 miles of shoreline.

ACS Objective 9: Maintain and restore habitat to support well-distributed populations of native plant, invertebrate and vertebrate riparian-dependent species.

Neither alternative retards or prevents attainment of this objective. There would be no effect to the distribution within and between watersheds of native plants, invertebrates, and vertebrates. Some trees will be removed under the action alternative, but would not affect the distribution of these native species. Under existing conditions, there is sufficient habitat to support native plants, invertebrates, and vertebrates.

In summary, Alternative 1 (No Action) and Alternative 2 (Proposed Action) are both consistent with the Aquatic Conservation Strategy of the Northwest Forest Plan as they do not retard or prevent attainment of the 9 Aquatic Conservation Strategy objectives and are consistent with the Standards and Guidelines, including RM-1.

ODEQ 303(d) Status

The 2004/2006 Oregon Department of Environmental Quality 303(d) list for water quality impaired water bodies does not include Wickiup Reservoir, but does include the Deschutes River for water temperature between Wickiup Reservoir Dam and the headwaters at Little Lava Lake. Neither alternative would affect water temperature.

Essential Fish Habitat (Magnuson-Stevens Fisheries Conservation and Management Act)

There is no Essential Fish Habitat (EFH) within the project area. Neither of the alternatives would have any effects to Essential Fish Habitat.

Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands)

Executive Orders 11988 and 11990 direct Federal agencies to avoid, to the extent possible, both short-term and long-term adverse impacts associated with the modifications of floodplains and wetlands. Neither alternative has specific actions that adversely affect wetlands and floodplains. Proposed activities in Alternatives 2 are compliant with the orders and USDA Departmental Regulation 9500-3.

Wildlife Resource

Affected Environment: The following species were included in this analysis. Species that are listed or proposed for listing as threatened or endangered, or are on the Regional Foresters sensitive species list are analyzed in the Biological Evaluation of threatened, endangered, and sensitive wildlife for the project. A variety of mammals and birds utilize the habitat available within and adjacent to the project area. Refer to the following table for a listing of species with special status

Table 2: Management Indicator Species, Focal Bird Species, Birds of Conservation Concern and High Priority Shorebirds.

Species	Status[1]	Habitat or Species Present?	Natureserve ranking in Oregon[2]	Possibly Limiting Habitat Feature[3]	Will Project Potentially Impact Species or Habitat?
BIRDS					
Golden eagle	MIS, BCC	N	S4	(6)	N
Red-tailed hawk	MIS	Y	S5	Large trees for nesting	N
Northern goshawk	MIS	N	S3B	(1)	N
Cooper's hawk	MIS	N	S4	Dense forest canopy	N
Sharp-shinned hawk	MIS	N	S4	(4)	N
Ferruginous hawk	BCC, Focal	N	S3B	Open sagebrush flats	N
Swainson's hawk	BCC	N	S3B	Open country	N
Prairie falcon	BCC, Focal	N	S4	6-rimrock and open country	N
Osprey	MIS	Y	S4	Large trees for nesting, waterbody	Y
Great Gray Owl	MIS	N	S3	1, 4-LPP,PP, 5	N
Flammulated owl	BCC, Focal	N	S3B	1,2, 4, 5 PP	N
Pileated woodpecker	MIS	N	S4	1, 2, moist mixed conifer	N
Northern flicker	MIS	Y	S5	2	Y
Hairy woodpecker	MIS	Y	S4	2	Y
Northern 3-toed woodpecker	MIS	N	S3	2, LPP	N
Lewis's woodpecker	MIS, BCC, Focal	N	S2, S3B	2-large snags, 7-burns	N
White-headed woodpecker	MIS, BCC, Focal	Y	S2	1-PP, 2, 7-sugar pine	Y
Black-backed woodpecker	MIS, Focal	N	S3	1-LPP, 7-burns	N
Williamson's sapsucker	MIS, BCC, Focal	N	S4B, S3N	2-large snags	N
Red-naped sapsucker	MIS, Focal	N	S4	2, aspen & riparian woodland	N
Pygmy nuthatch	Focal	Y	S4	1-PP, 2, 7-large trees	Y
Brown creeper	Focal	N	S4	1-MC, 7-large trees	N
Olive-sided flycatcher (NTMB)	Focal	Y	S3B	1, 2, 7 –burns, clearings, edges	Y
Hermit thrush	Focal	N	S4	1-MC, 7-dense, multi-canopy conifers	N
Chipping sparrow (NTMB)	Focal	Y	S4	7- open understory w/regen.	Y
Nashville warbler (NTMB)	Focal	N	S4	Riparian, deciduous woodland	N
Ash-throated flycatcher	Focal	N	S4	Scrub, juniper	N
Sage thrasher (NTMB)	Focal	N	S4	Sage and mt. mahoghany	N
Gray flycatcher (NTMB)	Focal	N	S4	3	N
Clark's nutcracker	Focal	N	S4	High elevation forest	N
Loggerhead shrike	BCC, Focal	N	S3B, S2N	Open habitats with scattered shrubs and trees	N
Sage sparrow	BCC, Focal	N	S4	3-sagebrush habitats	N
Brewer's sparrow	BCC, Focal	N	S4	Sagebrush	N
Virginia's Warbler	BCC, Focal	N	S4	6-Mountain mahogany	N
Great blue heron	MIS	N	S4	Wetland, marsh	N
Waterfowl	MIS	Y		Lakes, streams, rivers	Y
Wilson's Phalarope	BCC, HPSB	N	S4	Shallow ponds within grassy marshes	N
Sandhill crane	Focal	N	S3	Wetlands, meadows	N
MAMMALS					
Rocky Mt. elk	MIS	N	S5	(7-grass, shrubs winter rng.)	N
Mule deer	MIS	N	S5	(7-shrubs winter rng.)	N
American marten	MIS	N	S3	X (1-MC, LPP, 7-CWM)	N
Western big-eared bat	MIS	N	S2	(3-foraging, 6-caves)	N
SURVEY AND MANAGE SPECIES					
Crater Lake Tightcoil	S&M	N		Riparian	N

NTMB = Neotropical Migratory Bird

[1] Status: MIS – Management Indicator Species, BCC - USFWS Birds of Conservation Concern (USDI 2002), HPSB - USFWS High Priority Shore Birds (USDI 2004), Focal – Species identified in the Conservation for Landbirds of the East-Slope of the Cascade Mountains in OR and WA (Altman 2000) and the Conservation Strategy for Landbirds in the Columbia Plateau of Eastern OR and WA (Altman and Holmes 2000), S&M – Northwest Forest Plan Survey and Manage Species.

[2] Oregon Sensitive Species determined from the Natureserve database for Oregon: S2 = imperiled, S3 = vulnerable, S4 = apparently secure,

S5 = secure, B = breeding, N = non-breeding

[3] Habitat feature codes: 1 = late and old successional forest (LOS), 2 = snags, 3 = mature shrubs, 4 = dense conifers for nesting/foraging, 5 = meadows or grassy openings for foraging, 6 = special/unique habitats (rock, cliffs, caves, etc.), 7 = other, noted. Abbreviations: LPP = lodgepole pine, PP = ponderosa pine, MC = mixed conifer, CWM

Effects Discussion

The reservoir provides habitat for a few other species not listed above, such as the spotted frog and the horned grebe. Spotted frogs have not been found in the project area most likely because of the slope and the steady decrease in water levels. Horned grebes are mainly seen during the fall migration period and not during the breeding season.

The Gull Point Boat Ramps Improvement Project occurs adjacent to habitat suitable for northern bald eagles and the buffleheads. Both occur on the Regional Forester's sensitive species list.
The following species and their habitats were considered in the preparation of this document to determine if the project/activity would have any negative effects on listed, proposed, candidate or sensitive species in order to meet the requirements for a biological evaluation. Those with bolded type, are known, suspected or have some potential to occur within the project boundary and could potentially be affected by the project/activity. There are no known current sites occupied, no known historic sites, and no current or potential habitats for those species that have not been designated.

Table 3 The following threatened, endangered, candidate or sensitive animal species are either known to occur or may potentially occur on the Bend-Ft Rock Ranger District.

SPECIES	FEDERAL & FOREST CLASSIFICATION	HABITAT	NATURESERVE RANKING	PRESENCE IN PROJECT AREA
Birds				
Northern Spotted Owl *(Strix occidentalis caurina)*	T, MIS	Old growth/ mixed conifer forests	S3	No habitat
Northern Bald Eagle *(Haliaeetus leucocephalus)*	**S, MIS**	**Lakeside or riverside with large trees**	**S4B, S4N**	**Habitat adjacent to proposed treatment areas; no nesting use documented in proposed treatment areas.**
American Peregrine Falcon *(Falco peregrinus anatum)*	S, MIS*	Riparian, cliffs	S2B	No habitat
Bufflehead *(Bucephala albeola)*	**S**	**Lakes, snags**	**S2B, S5N**	**Habitat adjacent to proposed treatment areas; no nesting use documented in proposed treatment areas.**
***Harlequin Duck* (Histrionocus histrionicus)**	S,	Rapid streams, trees	S2B, S3N	No habitat
***Greater Sage Grouse* (Centrocercus urophasianus)**	S*	Sagebrush flats	S3	No habitat
***Horned Grebe* (Podiceps auritus)**	S	Lakes, emergent vegetation	S2B, S5N	Documented on Wickiup Reservoir during the fall migration. No nesting habitat at boat ramp sites.
Red-Necked Grebe *(Podiceps grisegena)*	S	Deep water, marshy lakes	S1B, S4N	No habitat

SPECIES	FEDERAL & FOREST CLASSIFICATION	HABITAT	NATURESERVE RANKING	PRESENCE IN PROJECT AREA
Yellow Rail *(Coturnicops noveboracensis)*	S ∗	Marshes	S1B	No habitat
Tricolored Blackbird *(Agelaius tricolor)*	S ∗	Lakeside, bullrush	S2B	No habitat
Mammals				
Canada Lynx *(Lynx Canadensis)*	T	Subalpine fir with lodgepole pine	S1	No habitat
Pacific Fisher (*Martes pennanti*)	C	Mixed conifer forest, complex forest structure	S2	No habitat
California Wolverine *(Gulo gulo luteus)*	S, MIS	Mixed conifer, high elevation	S1	No habitat
Pygmy Rabbit *(Sylvilagus idahoensis)*	S	Sagebrush flats	S2	No habitat
Amphibians				
Oregon Spotted Frog *(Rana pretiosa)*	C, S	Streams, marshes	S2	Documented on Wickiup Reservoir in certain locales; no breeding habitat at the boat ramp sites.
Key to abbreviations: T=Threatened, E=Endangered, P=Proposed for Federal listing, S=USFS Region 6 Sensitive, C=USFWS Candidate species, ∗Birds of Conservation Concern Oregon Sensitive Species determined from the Natureserve database for Oregon: S1, critically imperiled, S2 = imperiled, S3 = vulnerable, S4 = apparently secure, S5 = secure, B = breeding, N = non-breeding				

Potential impacts of the activity/project for the species associated with the affected area are as follows:

Bald Eagle: *USFS Region 6 Sensitive, Deschutes Management Indicator Species, S4B and S4N – apparently secure in breeding and non-breeding habitat.*

There is a bald eagle nest site approximately 0.5 miles east of the North Wickiup Boat Ramp and 0.9 miles east of the Gull Point Boat Ramp. This pair has been in the area since 1978, and at its current nest site location since 1991. This pair failed in 2007, and has not successfully fledged young since 2002. The Bald Eagle Management Area (BEMA) for this pair, as identified by the Deschutes National Forest Land and Resource Management Plan (LRMP), does not occur within the project boundary, but does encompass habitat to the north and east of the project area. The eagles from this site forage in the open waters of the reservoir, and have been known to roost in the North Wickiup Campground.

This pair of eagles occurs outside of the normal 0.25 mile restriction area for disturbance. Most of the activities associated with this project would have no impact to the bald eagles or their habitat. Heavy machinery, including a rock breaker, would need to be used to break apart the concrete boat ramp material. This activity may occur at levels louder and more consistent than other heavy equipment disturbance. It could directly impact bald eagles during the nesting season with the noise disturbance and potentially cause nesting failure.

The amount of activity at Wickiup Reservoir is already high. It's difficult to understand the impact that humans and boating disturbance has already had on the bald eagles at Wickiup Reservoir. Many of these pairs have been there for years and may be accustomed to and tolerate the increased use of the reservoir. Looking at past survey data, those pairs that nest closest to the shoreline of Wickiup Reservoir have had higher incidences of nesting failure over the years. It could be from many things including human disturbance, competition from osprey and competition from other bald eagles.

Studies have shown that recreational activities such as boating can actively (boaters coming to close to an eagle and flushing them) and passively (humans change the eagles environment and thus change their behavior) displace eagles (Knight et al, 1993). Cumulatively, this project could increase both active and passive disturbance to eagles, which could continue to impact pairs of eagles that have trouble reproducing. This project may impact individuals, but would not negatively impact populations or contribute towards a trend to federal listing.

Bufflehead: *R6 Sensitive, Deschutes Management Indicator Species; S2B - imperiled in breeding habitat, S5N - secure in non-breeding habitat.*

The bufflehead typically nests at high-elevation forested lakes in the central Cascades, using cavities or artificial nest boxes in trees close to water (Gilligan et al. 1994, Marshall 1996). Buffleheads have been observed on Wickiup Reservoir and have nested in former northern flicker cavities in the past (Marshall et. al 2003). The bufflehead is a "diving" duck, foraging mostly on aquatic insects, but also aquatic plants and small fish.

The action alternative proposes to clear-cut approximately 0.66 acres of habitat, most of which has already been impacted by human use. Few snags were found in these areas, but it is possible for nesting habitat to occur within and adjacent to the project area. These birds would generally arrive in April with young fledged by July to early August. Removing the trees for the parking lot expansion may remove nest trees and if activities occur during the spring nesting season, may disturb nesting buffleheads, and potentially result in direct mortality of nesting ducks and/or young. This potential impact is slight within the actual area of tree removal because of the lack of snags and few cavity-nesting holes seen, but indirect impacts could occur to birds that may nest adjacent to these stands. Activities from the parking lot and boat ramp construction could also be disruptive and indirectly impact nesting birds.

Because of the incidental and slight chance of this potential impact occurring, negligible cumulative impacts are anticipated. Harvest activities may impact individuals but would not negatively impact populations or contribute towards a trend to federal listing.

Red-tailed Hawk: *Deschutes Management Indicator Species, S5 – Secure*

Red-tailed hawks have an extremely wide tolerance for habitat variation. These hawks are largely perch hunters. Habitat types that provide suitable perches (trees, utility poles, outcrops, etc.) and that are open enough to permit the detection of ground-dwelling prey, typically support red-tailed hawks. Red-tailed hawks frequent woodland, agricultural land, clearcuts, grasslands, sagebrush plains, alpine environments, and urban areas. They construct nests in a variety of situations including tree, utility poles cliffs, and place there nests higher than other broad-winged hawks (Marshal et al. 2003).

Habitat adjacent to the project area provides nesting and foraging habitat, due to the amount of fragmentation and large trees. Red-tailed hawks are commonly observed soaring within the forested areas adjacent to Wickiup Reservoir and are common across the district. There are no known nest sites that occur within the project area. The closest known nest site is over 1.5 miles away.

Natureserve (2006) ranks this species as "secure" in most of continental United States, including Oregon.

The proposed project would remove less than one acre of habitat, with 0.4 occurring where there are potential nest trees. Mitigation measures are proposed in the event an active nest is located within or adjacent to the project during project implementation. It is highly unlikely that a red-tailed hawk would nest within this portion of the project area because of its proximity to human activity, but they could nest within ¼ mile.

Due to the generalist nature of this species, no cumulative impacts to this species are anticipated. There would be negligible change in available nesting and foraging habitat.

Osprey: *Deschutes Management Indicator Species, S - Apparently Secure*

Osprey historically nested only in forested regions of Oregon because of its selection for large live trees (broken top) or dead trees (snag) for nest sites. Nests in Oregon are usually located within 2 mi of water with an accessible fish population. Nest sites on utility poles are common due to land clearing for agriculture and lack of suitable habitat for nesting. They will also use nest platforms developed for Canada Geese as nest sites, which was noted to occur at wildlife refuges (Marshall et al. 2003).

There are no designated Osprey Management Areas associated with the project. There is an active osprey nest site near the road entrance to the North Wickiup Boat Ramp. This pair was very agitated by my presence during a field review in May.

Natureserve (2006) reports that osprey numbers are increasing and gives the osprey an "apparently secure" ranking in Oregon.

Activities from this project would directly and indirectly impact osprey. If construction activities are conducted during the nesting season, the noise and line-of-sight disturbance could directly impact the osprey pair and cause nesting failure. There is a mitigation measure proposed that would protect this active nest from disturbance.

Ospreys are quite tolerant of human activities if not molested (Marshall et al. 2003). Ospreys generally begin the nesting process in April to early May. This pair could begin nesting prior to fishing season opening and the additional parking area near the nest getting used (late April). Several things could happen to this pair; the pair may fail due to the closeness of the parked vehicles to the nest, they could get agitated but continue to use the nest and become accustomed to closer human presence, or they could abandon the nest altogether

Although this project could have direct and indirect impacts, due to this species ability to tolerate human disturbance, there would be no cumulative impacts to osprey as a result of this project. There would be negligible change in available nesting and foraging habitat.

Woodpeckers, Cavity Nesters and Focal Bird Species

Northern Flicker: *Deschutes Management Indicator Species, S5 Secure*

Northern flickers are perhaps the most common woodpecker residents in Oregon. They can be found in a range of terrestrial habitat but are generally abundant in open forests and forest edges adjacent to open country (Marshall et al 2003). Being a large cavity nester they require large snags or large trees with decay in order to build their nests.

Large snags are few within and adjacent to the proposed treatment areas.

Hairy Woodpeckers: *Deschutes Management Indicator Species, S4 Apparently Secure*

Bull et al (1986) reported hairy woodpeckers using both lodgepole and ponderosa pine habitats and a variety of snags sizes. This species would be in mature stands and utilize (i.e. nest and forage) snags greater than 10 inches in diameter.

There is habitat for this species within and adjacent to the proposed treatment areas.

White-headed Woodpeckers: *Deschutes Management Indicator Species, Landbird Focal Species, S2 Imperiled*

White-headed woodpeckers utilize both live and dead ponderosa pines. They will forage on both live and dead pines often selecting the large diameter pines because they have more seeds and make more suitable nesting habitat. Having large ponderosa pine does not assure this species' presence. Indications have been made that a well-developed understory of trees and shrubs may encourage mammalian predation on nests (Marshall 1997). White-headed woodpeckers are absent from early seral ponderosa pine stands. These woodpeckers are poor excavators and generally select for a more moderately decayed or softer snag in which to nest (Dixon 1995 as cited in Marshall 1997). This woodpecker species' habitat can also be an indicator of goshawk, and pygmy nuthatch habitat.

The project area may not currently afford nesting habitat for this species because of the lack of large trees and snags, but white-headed woodpeckers may forage within and adjacent to the project area.

Pygmy Nuthatch: *Landbird Focal Species, S4 Apparently Secure*

Pygmy nuthatches are a focal species for large trees in the ponderosa pine stand types.

In Oregon, this species occurs in mature and old growth ponderosa pine or mixed-species forests dominated by ponderosa pine. However, sometimes they forage in young ponderosa pines and in lodgepole pine stands adjoining or near ponderosa pine stands (Stern, Del Carlo, et al 1987). They nest in cavities in snags or dead portions of live trees (Norris 1958). Foraging is on outer branches in upper canopy on needle clusters, cones, and emerging shoots. Their diet varies by season and locale, but consists mainly of insects (Norris 1958). Population declines have been based on habitat deterioration caused by loss of large diameter snags and replacement of large ponderosa pines with smaller trees and other conifer species through fire control and logging (Agee 1993).

Pygmy nuthatches can possibly be found within and adjacent to the project area.

Olive-Sided Flycatcher: *Landbird Focal Species, S3B Vulnerable in breeding habitat*

Olive-sided flycatchers are a focal species for edges and opening created by wildfire in mixed conifer LOS habitat.

Breeding habitat is conifer forests with the following circumstances: within forest burns where snags and scattered tall, live trees remain; near water along the wooded shores of streams, lakes, rivers, beaver ponds, marshes, and bogs, often where standing dead trees are present; at the juxtaposition of late- and early-successional forest such as meadows, harvest units, or canyon edges; and in open or semi-open forest stands with a low percentage of canopy cover (Altman and Sallabanks 2000). It forages mostly from high, prominent perches at the top of snags or the dead tip or uppermost branch of a live tree. This bird species has been steadily declining since 1966. Factors potentially related to the decline of the species on breeding grounds include habitat loss through logging, alteration of habitat from forest management practices including clearcutting and fire suppression, lack of food resources, and reproductive impacts from nest predation or parasitism.

This species can be found within and adjacent to the project area.

Chipping Sparrow: *Landbird Focal Species, S4 Apparently Secure*

Chipping sparrows are a focal species of more open ponderosa pine stands with active regeneration.

The chipping sparrow is a low-tree/ground-nester that uses open-overstory ponderosa pine and lodgepole pine (Marshall et al 2003). This species prefers these open coniferous forests or stands of trees interspersed with grassy species or other areas of low foliage suitable for ground foraging (Farner 1952). In Central Oregon, they are found in good numbers in juniper, ponderosa pine, and lodgepole pine forests. This bird species feeds primarily on seeds of grasses and herbaceous annuals, adding insects and other invertebrates when breeding (Middleton 1998). Habitat changes have brought on increased risk of cowbird brood parasitism and competition with house sparrows and house finches (Middleton 1998).

This kind of habitat can be found in minor amounts within and adjacent to the project area.

This project as proposed would be removing a minor amount of habitat for the above species. Removing the trees to create the new parking areas could directly and/or indirectly impact these species within and adjacent to the project area if it occurs during the nesting season. Disturbance during the nesting season caused by project activities may interrupt nesting or cause nest failures for some breeding pairs (see mitigation measures).

No cumulative impacts to woodpeckers, cavity nesters, focal bird species, or waterfowl populations are expected. Harvest activities may impact individuals but would not negatively impact populations or contribute towards a trend to federal listing.

Waterfowl: *Deschutes Management Indicator Species*

Several species of waterfowl utilize the habitat found at Wickiup Reservoir. Some of these species include the common loon, pied-billed grebe, eared grebe, western grebe, gadwall, mallard, northern pintail, lesser scaup, common and Barrow's goldeneye, and hooded merganser to name a few. Most of

these species nest in grassy areas near the lakes edge or within emergent vegetation. This type of breeding habitat does not occur at the boat ramp sites. A few species, including goldeneyes and mergansers nest in cavities, which limited habitat is available within the project area.

The action alternative proposes to clear-cut approximately 0.66 acres of habitat, most of which has already been impacted by human use. Few snags were found in these areas, but it is possible for nesting habitat to occur within and adjacent to the project area. Removing the trees for the parking lot expansion may remove nest trees and if activities occur during the spring nesting season, may disturb nesting waterfowl, and potentially result in direct mortality of nesting birds and/or young. This potential impact is slight within the actual area of tree removal because of the lack of snags and few cavity-nesting holes seen, but indirect impacts could occur to birds that may nest adjacent to these stands. Activities from the parking lot and boat ramp construction could also be disruptive and indirectly impact nesting birds (see mitigation measure).

Because of the incidental and slight chance of this potential impact occurring, negligible cumulative impacts are anticipated. Harvest activities may impact individuals but would not negatively impact populations or contribute towards a trend to federal listing.

Conclusions

The project area does not provide critical habitat for any wildlife species. The area provides habitat for the species described above, but the effectiveness of the habitat is low because of the consistent use by recreationists from April through October. The amount of habitat being removed for the parking area is also minimal, and if project design criteria and mitigation measures are adhered to, there should be no direct/indirect impacts to wildlife species.

The project design criteria and mitigation measures would create conditions so that there would be no direct or indirect impacts to populations of northern bald eagles or buffleheads that utilize the habitat within and adjacent to the project area.

The Gull Point Boat Ramps Improvement Project meets all applicable Project Design Criteria as described in the 2006-2009 Joint Aquatic and Terrestrial Programmatic Biological Assessment. This project would have “no effect/impact” on any listed species or their habitat. A biological assessment (BA) and/or Level I review are not required.

Botany Resource

Affected Environment

The area is characterized by a ponderosa pine/bitterbrush-manzanita/needlegrass plant association. Soils are characterized by sandy volcanic ash and pumice lapilli over a buried soil on glacial outwash.

There are no known Threatened, Endangered, or Sensitive (TES) plant species in the vicinity of the project. The site does not offer high-quality habitat for any known TES plant species, partly due to its inherent nature, and partly due to the high impact that recreationists have had on the site.

Additionally, the bryophytes, lichens, and fungi added to the Forest’s sensitive plant list in July 2004 (that had previously been on the Survey and Manage species list in 2001) do not have potential habitat within the project area.

No habitat for Threatened, Endangered, Proposed, or Candidate plant species (these species, and their habitats, are listed in Appendices C and D) exists within the project area, with the possible wildcard exception of *Botrychium lineare*, a Candidate species. Its range distribution is very wide and its habitat varies just as widely. However, it has not been found on the Deschutes National Forest, (or more specifically in the project area), after 15 years of project-level surveys, which include complete lists of plants encountered. The nearest known site lies in northeastern Oregon, in Wallowa County.

No noxious weeds were found at either site. However, at the North Wickiup ramp, two exotic species were found. About 50 mullein plants were present, both in adult and rosette form, and the adults and some of the rosettes were pulled. Along with that, there was cured cheatgrass intermingled with the mullein. These species were found in the area where the upland/beach/ramp intersects.

Survey and Manage Plant Species

Vascular Plants

There is no habitat present within the project area for *Botrychium minganense* and *B. montanum*, two grape-fern species, or for *Cypripedium montanum;* these species would require pre-disturbance surveys if habitat is present. Additionally, there are no known sites present within the project area for these species that would, according to Final Environmental Impact Statement (FEIS) direction, require management of those sites.

Bryophytes

Of the bryophytes requiring pre-disturbance survey if habitat is present, there is no habitat present within the project area for *Marsupella emarginata* var. *aquatica*, *Tritomaria exsectiformis*, and *Tetraphis geniculata.* Additionally, there are no known sites present within the project area for these species that would, according to FEIS direction, require management of those sites.

Lichens

There is no habitat present within the project area for the one lichen, *Pseudocyphellaria rainierensis*, that requires pre-disturbance survey if habitat is present. Additionally, there are no known sites present within the project area for this species that would, according to FEIS direction, require management of those sites.

Fungi

There is no habitat or known sites present within the project area for the one fungi species, *Bridgeoporous nobilissimus*, that requires pre-disturbance survey if habitat is present. Additionally, there are no known sites present within the project area for the other species that would, according to FEIS direction, require management of those sites.

Alternative 1 (No Action):

There are no expected effects in this alternative as there would be no disturbance or activity.

Alternative 2 (Proposed Action):
There are no expected direct, indirect, or cumulative effects to Survey and Manage species in this alternative, because there is no Survey and Manage Plant habitat located within the project area, nor are there any known Survey and Manage sites present.

Similarly, there is no effect to TES plant species because TES plant species or high-probability TES plant habitat do not exist within the project.

Regarding invasive plants, even with mitigations properly followed, it is possible that the mullein and cheatgrass found at North Wickiup will be spread to more of the site. This is because equipment needed to construct the new ramps will likely pick up soil contaminated with weed seeds and spread it as the equipment moves about the site. Weed seeds could also be moved off-site; thus making Botany mitigation #1 (with its requirement to clean equipment prior to moving to the next job site) important to follow.

It is also quite possible for weed seeds to be brought into the project via fill material such as gravel. If this is needed for this project, it is important for the material to be inspected prior to its being brought in. The inspection will be able to detect any weeds growing in it, but not any weed seeds imbedded in it. For this reason, it is recommended to monitor the project sites for weed introductions after project completion.

Cultural Resource

Affected Environment: Several previous projects adjacent to the current project area located no historic properties, including historic and prehistoric sites, in the vicinity of the boat ramp and parking areas. Surveys for this project located no cultural properties or potential historic properties.

Alternative 1 (No Action), Alternative 2 (Proposed Action): No adverse or beneficial effects to cultural properties are expected from any of the alternatives.

Scenic Resource

Affected Environment: The project area is located within the Foreground viewing distance zone. The existing scenic integrity provides a variety of disturbed and undisturbed areas. Past human activities (recreation development) have intruded into the "natural appearing" landscape character within the Cultus Lake area. Current recreation use is high at the two boat ramps. Existing developed recreation facilities are well established with strong historical, cultural, and recreational values and usage. In general, most of these facilities blend into and are subordinate to the natural environment although the impact on landscape character will always be evident. Although recreational use of of the area has grown, the proposed project would not be expected to substantially modify recreational use numbers. The impact on landscape character and scenery would also directly correlate with the level of proposed development.

The effect on scenic resources, specifically on landscape character and scenic integrity, can be classified into two categories, short-term (0-5 years) and long-term (5 years and beyond). Effects from the proposed management activities would be most evident to the visiting public within the immediate Foreground landscape (0-300').

Alternative 1 (No Action): There would be no change to the existing landscape character or scenic quality level. Routine and basic site maintenance would continue as required to meet basic health and safety standards and guidelines.

Alternatives 2 (Proposed Action): The proposed activities are within the Intensive Recreation management allocation that is within the Roaded Natural classification. The Roaded Natural (Recreation Opportunity Spectrum (ROS) classification) and Intensive Recreation experience are consistent with the Forest Plan and the setting would be expected to remain unchanged or slightly improved upon with the completion of this project. The overall effect on scenic view, landscape character, and recreation experience is expected to be minimal during reconstruction activities. Upon completion of this reconstruction project, including site rehabilitation of any impacted area during construction, the overall scenic quality and recreation experience would be expected to be maintained or benefit from the proposed activities. The removal of some existing vegetation from this site is unavoidable in order to meet the project goal and objective, as well as design criteria. With effective mitigation measures (Scenic Resource mitigation measures, page 14), the effect(s) on scenic view and landscape character would be expected to fully meet the Forest Plan and ROS classification for project area.

Public Health And Safety

Proposed activities in Alternatives 2 would improve public health and safety by: 1) the reduction of the risk of auto/human collision; 2) the reduction of the risk of human conflict; 3) the reduction of the risk from reduced line-of-sight from vegetation; and 4) the reconstruction and reconfiguration of the boat ramps which would reduce hazardous conditions capable of disabling vehicles, trailers, and/or injuring the public.

No significant adverse effects to public health or safety have been identified. The effects of implementation of the alternatives are well known, not highly controversial, and do not involve any unique or unknown risks. Effects meet or exceed state water quality standards.

Prime Lands

There are no lands within the planning area that are classified as prime farm or rangelands. Proposed activities in Alternatives 2 would not change areas classified as prime forestland. There would be no direct, indirect, or cumulative adverse effect to these resources and thus are in compliance with the Farmland Protection Act and Departmental Regulation 9500-3, “Land Use Policy”.

Civil Rights And Environmental Justice

Civil Rights legislation and Executive Order 12898 (Environmental Justice) direct an analysis of the proposed alternatives as they relate to specific subsets of the American population. The subsets of the general population include ethnic minorities, disabled people, and low-income groups. The purpose of the analysis is to determine whether adverse civil rights impacts are anticipated on an underrepresented population. The analysis is to determine also whether disparate or disproportionate impacts associated with the alternatives are anticipated. A primary purpose of the alternatives is to provide for the health and safety of all members of the public by reducing the risk of endangerment from vehicles. Provision of these benefits does not discriminate between subsets of the general population.

Compliance with State and Local Laws

Implementation of Alternative 1 (No Action), Alternative 2 (Proposed Action) would be consistent with relevant Federal, State and local laws, regulations, and requirements designed for the protection of the environment including the Clean Air and Clean Water Act. None of the alternatives establishes a precedent for future actions or a decision in principle about a future consideration.

Other Effects and Findings

The proposed activities would not cause long-term adverse effects to wetlands, fisheries, water quality and designated floodplains.

No Inventoried Roadless Areas, old growth stands, prime farmland, Wild and Scenic Rivers or parkland would be adversely affected by the proposed activities. No significant irreversible or irretrievable commitment of resources would occur under Alternatives 2 (Proposed Action).

The alternatives are consistent with the goals, objectives and direction contained in the Deschutes National forest Land and Resource Management Plan and accompanying Final Environmental Impact Statement and Record of Decision dated August 27, 1990 as amended by the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (1994), and the Browns/Wickiup Watershed Analysis, 1997. None of the alternatives establishes a precedent for future actions or a decision in principle about a future consideration.

LIST OF PREPARERS

This section identifies the Forest Service interdisciplinary team personnel who participated in the analysis and the preparation of the EA. For a list of organizations and individuals contacted during the scoping process, refer to the project file located at the Bend-Ft. Rock Ranger District.

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