Rim Lakes Recreation Improvements
Project Description

USDA Forest Service
Black Mesa Ranger District, Apache-Sitgreaves National Forests
Coconino County, Arizona

Project Overview

The Black Mesa Ranger District, U.S. Forest Service, is proposing the Rim Lakes Recreation Improvements project to improve recreational access, parking lots and boat ramp capacity, user experience, and the transportation infrastructure at the Woods Canyon and Willow Springs Lakes recreation areas. Proposed activities include reconstructing, widening, and adding turning lanes on the existing roads with an emphasis on National Forest System Road (NFSR) 105; enlarging and resurfacing existing parking lots; constructing overflow parking lots; reconstructing and expanding lanes on the Willow Springs boat ramp; constructing an accessible trail to connect to a new fishing pier; and adding more day-use picnic facilities. All actions are proposed to improve public safety by establishing redesigned roads and facilities to accommodate existing and foreseeable vehicle types and volume, reduce maintenance costs, and reduce traffic congestion occurring from the high volume of recreational users.

Project Location

The Rim Lakes Recreation Improvements project area lies adjacent to the Woods Canyon and Willow Springs Lakes and is approximately 25 miles west of the communities of Heber-Overgaard, in Coconino County, and within the Black Mesa Ranger District of the Apache-Sitgreaves National Forests (see figure 1). The Woods Canyon and Willow Springs Lakes are two of the most popular and most used recreation areas on the Apache-Sitgreaves National Forests. They provide opportunities for camping, fishing, boating, picnicking, and other recreational use to the local communities as well as the greater Phoenix metropolitan area. Both areas include a mix of parking lots for day-use, boat trailers, and mixed-use parking. Both areas have boat ramps, developed picnic areas, and developed campgrounds and are in close proximity dispersed camping. The Woods Canyon Lake area includes a permitted use convenience store.

The legal description of the project location for the Willow Springs Lake recreation area is sections 29 and 30, Township (T) 11 North (N), Range (R) 14 East (E), and for the Woods Canyon Lake recreation area is sections 13, 14, 23, 24, and 26, T11N, R13E, Gila and Salt River Meridian.
Figure 1. Project area map
Forest Plan Consistency

Management direction is found within the Managed Recreation section of the Land Management Plan for the Apache-Sitgreaves National Forests (A-S LMP), 2015. Desired conditions under the A-S LMP for managed recreation include providing sustainable recreation opportunities through accessible and maintainable recreation infrastructure and lowering the overall deferred maintenance of our roads, facilities, and other recreation constructed features. The management direction, as it relates to the proposed project, stems from increasing visitor use from high density populated urban areas and communities, and decreasing maintenance budgets tied to maintaining all existing and future recreation infrastructure. This analysis was developed in coordination and consistency with the A-S LMP.

Purpose and Need for the Project

Roads (particularly NFSR 105) and parking areas in the project area around both lakes were designed and constructed in the early 1970s. They are beyond their life expectancy resulting in failing of the asphalt surface including potholes, cracks, and erosion (see figure 2).

Figure 2. Patching and damage on NFSR 105

Traffic and parking congestion occurs from the increase in visitors, limited parking spaces, narrow road widths, inadequate turning radii for large vehicles on existing roads and parking lots, and the poor location of the Aspen campground entrance next to the Woods Canyon Lake parking lot entrance. One-lane boat ramps at both lakes limit boating access, resulting in long waits for users to launch boats, and fishing is often crowded along the shoreline of both lakes near the parking areas. Accessible trails or walkways are inadequate for lake access for people with disabilities, and users needing picnic sites exceeds capacity on high-use days. These conditions lead to minor accidents, frustrated users, drivers of larger vehicles driving and parking on curbs and road shoulders, and public use of unauthorized areas for recreation.
The Forest Service needs the existing roads and parking areas in the project area in conditions that will accommodate current and foreseeable vehicle types, minimize maintenance requirements, provide for safe passage, and lessen traffic congestion. The agency needs increased parking areas that will accommodate existing and foreseeable future increases in the volume of vehicles and recreational users at both lakes, access to the Aspen Campground that does not constrict traffic flow, and boat access at both lakes that will allow boaters to launch their boats with minimized wait time. We need accessible trails or walkways to the lakes and picnic sites that will meet user needs and accommodate the volume of users needing picnic sites on high-use days.

Moving the project area toward these desired conditions would improve public safety and reduce the high maintenance costs required for dilapidated roads and parking lots. These conditions would improve recreational access, capacity, and experiences for the variety and high numbers of both current and foreseeable future users.

**Proposed Action**

Under the proposed action, we propose the following activities:

**Woods Canyon Lake Recreation Area:**
- Widen and reconstruct existing roads and parking areas
  - Roads: NFSR’s 105, 105E, 105F, 105G, and 105N
  - Parking Areas: the Lower Woods Canyon Lake parking lot (an extension of NFSR 105), the Rocky Point Picnic Area parking area (along NFSR 105E and NFSR 105F) the Upper Woods Canyon Lake parking lot (NFSR 105G), and the Spillway Campground campsite parking spots (along loop of NFSR 105N)
• Construct a new overflow parking lot
• Relocate the Aspen Campground entrance
• Delineate two lanes on the boat ramp
See figures 4 and 5 for locations of these areas/proposed activities.

**Willow Springs Lake Recreation Area:**
• Widen and reconstruct existing parking areas
  • Parking areas: Willow Springs Lake day-use parking lot, Willow Springs Lake east mixed-use parking lot, and Willow Springs Lake west mixed-use parking lot
• Construct a new aggregate overflow mixed-use parking lot
• Reconstruct and expand the Willow Springs Lake boat ramp
• Construct a new fishing pier
• Construct an accessible trail/walkway
• Install/construct additional picnic facilities
See figure 6 for locations of these areas/proposed activities.
Figure 4. Woods Canyon Lake Recreation Area Project Activities
Figure 5. Woods Canyon Lake Recreation Area – Lower Area View
Figure 6. Willow Springs Lake Recreation Area Project Activities
**Details of Proposed Action Activities**

For most or all of the proposed action activities we would

- Widen, construct, or reconstruct infrastructure using heavy machinery such as graders, excavators, backhoes, dump trucks, and other equipment
- Pulverize asphaltic or concrete surfaces using milling machines
- Remove rock by hammering with heavy equipment and applicable attachments, and/or blasting
- Remove select trees and brush with feller bunchers, skidders, sawyers, and other mechanical equipment including removing trees with root exposure caused by past activities, erosion, or new construction along slopes, drainages, and lead off ditches
- Construct ditches, culverts, low water crossings, retaining walls, and other applicable drainage features

Design criteria and the proposed actions to which they apply are included at the end of the document.

**Woods Canyon Lake Recreation Area**

At specific locations, as shown on figures 4 and 5, and described below, we propose to

**Widen and Reconstruct Existing Roads and Parking Areas:** Pulverize existing asphaltic surfaces in place on the existing identified roads and parking areas. Remove curbed islands within parking lots. Reshape and regrade the area after the section of roadway or parking area is cleared to accommodate a new road template. Construct the new roadbed with select borrow and/or pulverized material (6 inch to 2 feet depth) for the subbase and crushed aggregate material (4 inch to 8 inch depth) for the base, hauled in with dump trucks and/or belly dumps. After completion of the base course, final surfacing would consist of either aggregate or asphalt.

After completion of the surface course, add striping on asphalt surfaced roads and parking areas for road centerlines, shoulders, turn lanes, and delineation of parking spaces. In some circumstances, bumper stops would be used in the parking spaces. Aggregate surfaced overflow parking lot spaces may be delineated with paint, reapplied annually or as needed, with fire hose, or not delineated. All parking lots would have the appropriate number of accessible spaces based on the total amount of parking spaces and would have pull through parking where. Other road alignment activities include adding and delineating turn lanes into Aspen Campground, Spillway Campground, and the RV dump station and straightening the section of road that turns sharply into the lower parking lot.
Construct a New Overflow Parking Lot: Construct a new overflow parking lot at the maintenance yard by removing trees from up to two acres and expanding the current graveled and native material area. The lot would provide approximately 90 new parking spaces, with a majority of single vehicle parking and some RV and boat and trailer parking. Reconstruct the entrance road by pulverizing the current one and replacing it with either an asphalt or graveled surface.

Relocate the Aspen Campground Entrance: Construct a new entrance into Aspen Campground and close the existing entrance. Relocate the concessionaire building, extend water and electrical utilities to the new entrance, and add new host campsites to the new entrance. Convert the existing host sites to additional campsites and relocate the dumpsters to a place near the new entrance.

Delineate Two Lanes on the Boat Ramp: Delineate two lanes on the existing boat ramp by placing a new boat dock in the middle of the ramp that extends out into the lake. The boat dock would operate via a pulley and cable system, allowing the dock to roll in and out of the water.
**Timeframes:** Reconstruction activities on roads, parking lots and other areas would focus on off-season use, weather permitting. Reconstruction of the roads and parking areas would occur in phases over a period of 10 to 20 years beginning with NFSR 105. Annual funding allocations and the severity of damage to road and parking areas would prioritize where the work begins.
Willow Springs Lake Recreation Area
At specific locations, as shown on figure 6 and described below, we propose to

Widen and Reconstruct Existing Parking Areas: Complete the same actions for reconstruction and widening of parking areas in the Willow Springs Lake Recreation Area as described for the Woods Canyon Lake parking areas (see Widen and Reconstruct Existing Roads and Parking Areas under the Woods Canyon Lake Recreation Area section). For the Willow Springs Lake east mixed-use parking lot, expand the existing parking lot directly west of the ramp, changing the one-way lane to two lanes (see figure 10 below) and providing one lane for preparing to launch boats and another to allow traffic to pull through past vehicles waiting to launch boats.

Figure 10. Existing parking with one-way lane on back right

Construct a New Overflow Parking Lot: Complete the same actions as outlined for the Woods Canyon Lake overflow parking lot to construct a new overflow parking lot in the area directly north of the west mixed-use parking lot and construct one or two entry and exit points. The lot would provide approximately 90 new parking spaces, with a combination of single vehicle, RV, and boat and trailer parking.

Figure 11. Existing boat ramp

Reconstruct and Expand the Willow Springs Lake Boat Ramp: Reconstruct and expand the existing boat ramp, with high strength concrete, to alleviate boat traffic congestion. Delineate two lanes on the boat dock similar to delineation on the Woods Canyon Lake boat ramp. Install a
canoe/kayak launch area adjacent to the boat ramp, on a stabilizing surface such as a geo-grid material. A full or partial closure of the east mixed-use parking area may be needed during some construction activities.

**Install a New Fishing Pier:** Install a new accessible fishing pier.

**Construct an Accessible Path:** Construct accessible paths consisting of either concrete, asphalt, or graveled surfacing to connect the east mixed-use parking lot, the day-use parking lot, and the new fishing pier. The trail would connect to an existing trail that begins at the east-mixed use parking lot and an existing path that joins the day-use parking lot area.

**Construct Additional Picnic Sites:** Construct three to seven picnic sites near the day-use parking lot, installing features such as tables, grills, and pavilions.

**Timeframes:** Reconstruction activities on roads, parking lots and other areas would focus on off-season use, weather permitting, with the boat ramp reconstruction and pull-through lane widening occurring within 3 to 5 years. Other activities would be completed in phases over the course of 10 to 20 years, and prioritize by funding allocations and safety considerations.
<table>
<thead>
<tr>
<th>Applicable Proposed Activities</th>
<th>Main Resource Area(s)</th>
<th>Item</th>
<th>Design Criteria Description</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Activities</td>
<td>Cultural Resources</td>
<td>Protection of Historic Sites</td>
<td>All Historic Properties would be avoided.</td>
<td>National Historic Preservation Act of 1966, As Amended; US Forest Service Tribal Relations Directives, Forest Service Manual (FSM 1560), Forest Service Handbook (FSH 1509.13)</td>
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<tr>
<td>All Activities</td>
<td>Cultural Resources</td>
<td>Protection of Historic Sites</td>
<td>1950s and 1960s-era US Forest Service Recreation Features such as stone stairs and walls would be avoided.</td>
<td>National Historic Preservation Act of 1966, As Amended</td>
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<tr>
<td>All Activities</td>
<td>Recreation</td>
<td>Accessibility</td>
<td>All work would be completed in accordance with the Architectural Barriers Act (ABA), Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG), and Forest Service Trails Accessibility Guidelines (FSTAG)</td>
<td>Architectural Barriers Act of 1968 and A-S Forest Plan, August 2015</td>
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<tr>
<td>All Activities</td>
<td>Transportation</td>
<td>Health and Safety</td>
<td>Vegetation and trees would be removed within the clear zone, diameter 6 inches or greater, or small trees and shrubs grouped together such that they have the same effect as a single tree</td>
<td>Highway Safety Act</td>
</tr>
<tr>
<td>All Activities</td>
<td>Transportation</td>
<td>Health and Safety</td>
<td>Vegetation and trees would be removed outside of the clear zone that pose an immediate falling threat, that will reach the clear zone, travel lanes of the roadway, or fall on across rights-of-way fence</td>
<td>Highway Safety Act</td>
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<tr>
<td>All Activities</td>
<td>Transportation</td>
<td>Traffic Safety</td>
<td>MUTCD would be used for all temporary and permanent signing and traffic control devices for roads and parking areas</td>
<td>FSM 7731.16</td>
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<tr>
<td>All Activities</td>
<td>Vegetation &amp; Fuels</td>
<td>Fuels Reduction</td>
<td>All slash created by the project would be removed within 30 days of creation of it from project activities.</td>
<td>Prevent buildup of fuels in the area.</td>
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<tr>
<td>All Activities</td>
<td>Vegetation &amp; Fuels</td>
<td>Invasive Species</td>
<td>All equipment would be washed prior to entering the Apache-Sitgreaves National Forests’ land to reduce the introduction of invasive species.</td>
<td>Reduction of Invasive species</td>
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<tr>
<td>All Activities</td>
<td>Vegetation &amp; Fuels</td>
<td>Health and Safety</td>
<td>Trees would be removed within the project limits that have main tree root exposure, or construction activities have damaged main tree roots</td>
<td>Prevent buildup of fuels in the area.</td>
</tr>
</tbody>
</table>