

**APPENDIX C
BIOLOGICAL ASSESSMENT**

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Glen Canyon National Recreation Area

Arizona / Utah



Lees Ferry Road Rehabilitation and Paria River Bridge Stabilization

Biological Assessment

July 2012



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BIOLOGICAL ASSESSMENT
LEES FERRY ROAD REHABILITATION AND PARIA RIVER BRIDGE STABILIZATION
GLEN CANYON NATIONAL RECREATION AREA, UTAH AND ARIZONA

Location: Coconino County, Arizona

Township 40 North, Range 7 East of the Gila and Salt River Meridian,
Sections 13, 22, 23, 24, 27, 33, and 34

U.S. Geological Survey (7.5' Navajo Bridge and Lees Ferry, Arizona topographic quadrangles (1985)

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INTRODUCTION AND SUMMARY

The purpose of this biological assessment is to determine whether the actions proposed in the preferred alternative of the Lees Ferry Road Rehabilitation and Paria River Bridge Stabilization Environmental Assessment, Glen Canyon National Recreation Area, may affect any of the federally listed endangered, threatened, proposed or candidate species. This biological assessment is prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act [16 *United States Code* 1536 (c)] and follows the standards established by the National Park Service (2001 and 2006).

Based on the analyses of the effects of the preferred alternative (referred to as the proposed action in this biological assessment) on special status species, a summary of determinations of effect for species considered in this document are as follows:

- *May affect, but is not likely to adversely affect:* Brady pincushion cactus (*Pediocactus bradyi*), razorback sucker (*Xyrauchen texanus*), California condor (*Gymnogyps californianus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and Mexican spotted owl (*Strix occidentalis lucida*).
- *No effect:* Navajo sedge (*Carex specuicola*), Jones cycladenia (*Cycladenia humilis* var. *jonesii*), Colorado pikeminnow (*Ptychocheilus lucius*), bonytail (*Gila elegans*), humpback chub (*Gila cypha*), and yellow-billed cuckoo (*Coccyzus americanus*).

There would be no effect to designated critical habitats of the California condor, southwestern willow flycatcher, and Mexican spotted owl as a result of the proposed action. Designated critical habitat for the razorback sucker may be affected by short-term increases of water turbidity, but this effect would be unlikely to adversely affect its critical habitat.

The analyses of cumulative effects evaluates the impacts of other plans and projects that are related to the species being evaluated because these plans and projects would potentially affect the species' habitats. The other plans and projects include future, related federal actions that would occur in the project vicinity. There are no known state, tribal, or local plans or projects that are related to the proposed action or the species being evaluated, primarily because the project would occur within Glen Canyon National Recreation Area.

The project area is shown in figure 1, with more detail in figures 2, 3, and 4. The project area includes:

- The Lees Ferry Road from its junction with U.S. Highway 89A at Marble Canyon to about 6 miles northeast at the road's terminus at the boat launch ramp parking lot;

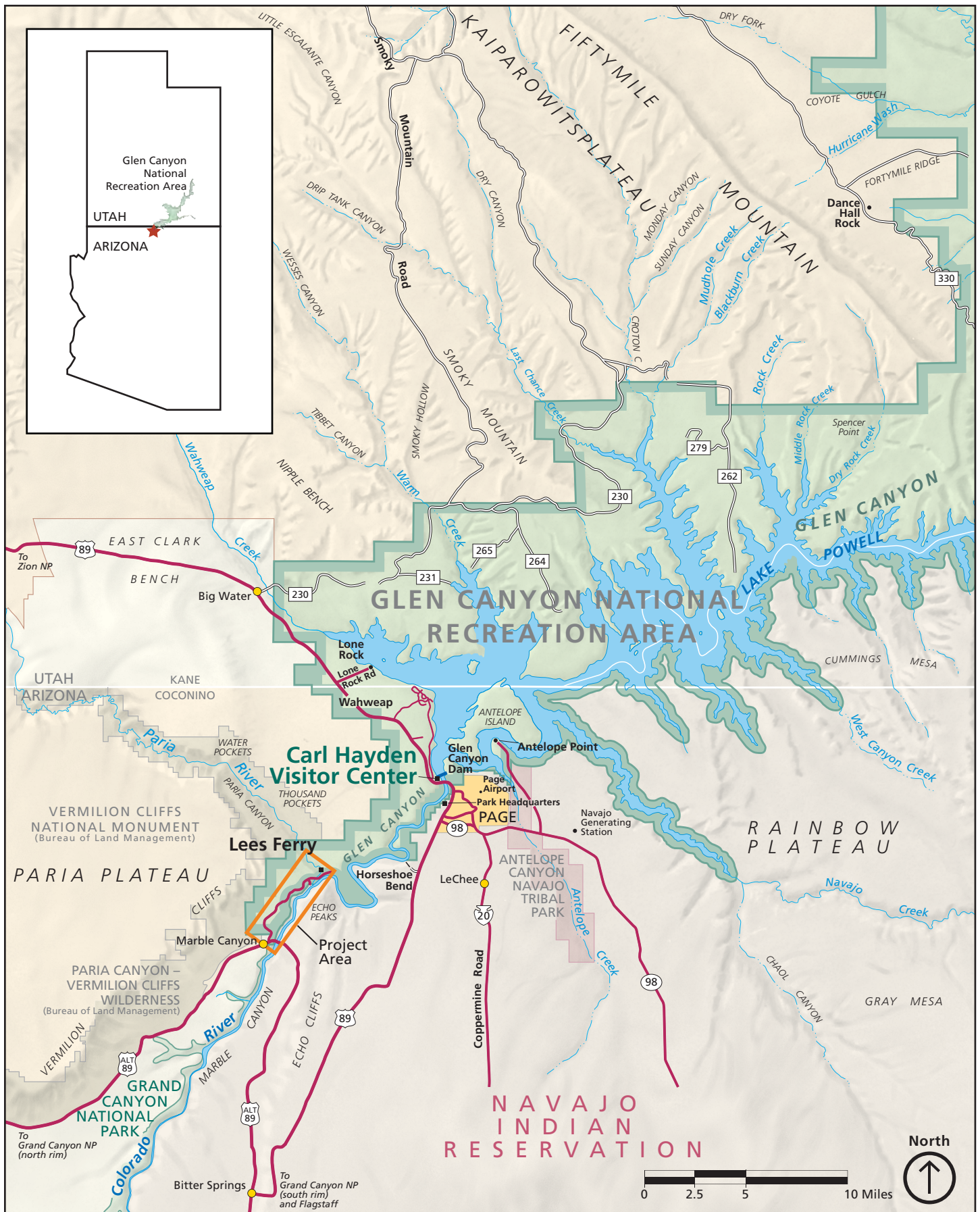


Figure 1: Vicinity Map
Glen Canyon National Recreation Area
U.S. Department of the Interior / National Park Service

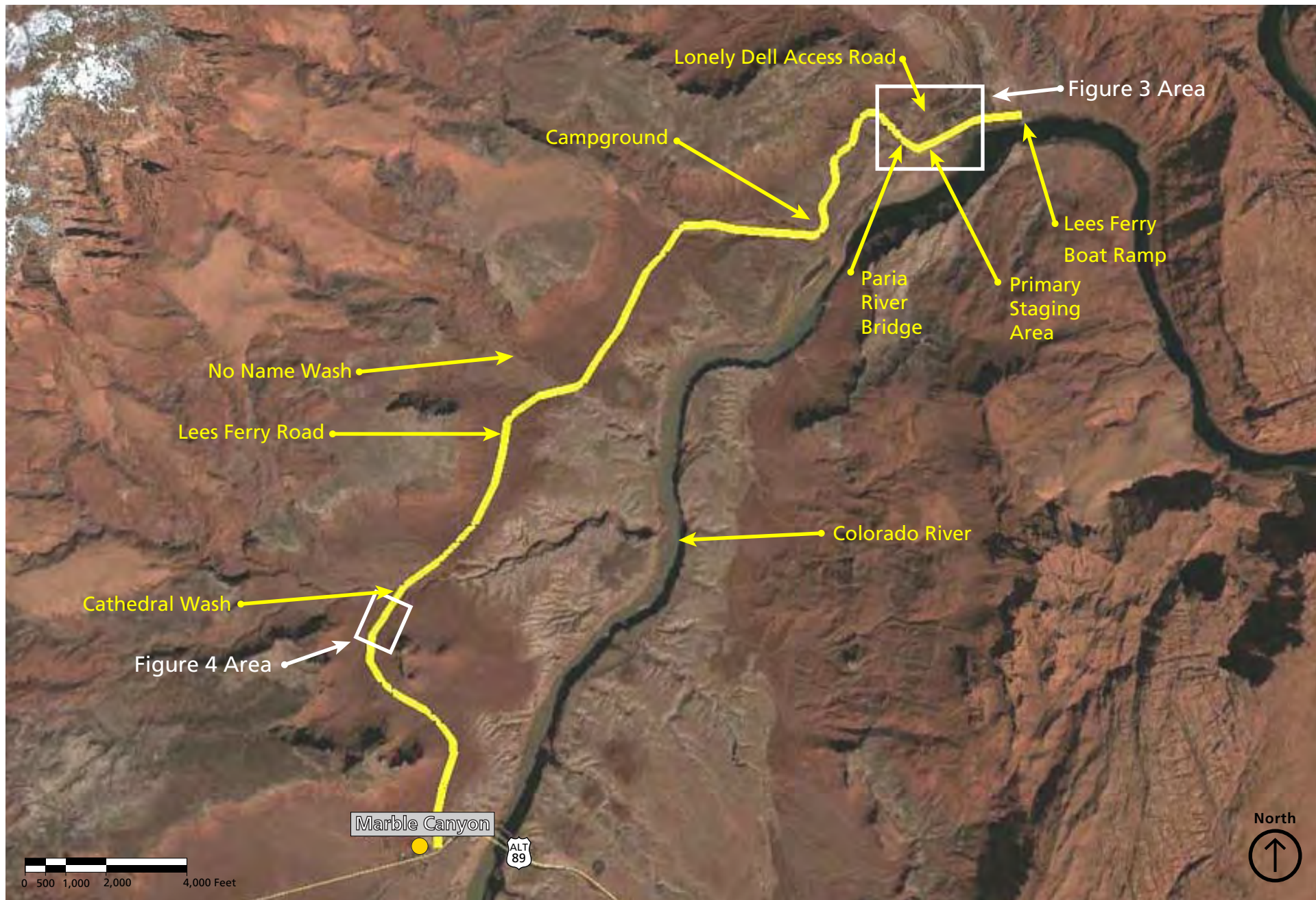


Figure 2: Lees Ferry Road Project Site Map
Glen Canyon National Recreation Area
U.S. Department of the Interior / National Park Service



Figure 3: Paria River Bridge Vicinity Site Map
Glen Canyon National Recreation Area
U.S. Department of the Interior / National Park Service



Figure 4: Cathedral Wash Bank Stabilization and Pullout
Glen Canyon National Recreation Area
U.S. Department of the Interior / National Park Service

- The Paria River's banks and river bottom at and adjacent to the Paria River Bridge; and
- A site along the Paria River where it flows adjacent to the Lonely Dell Access Road about 2,600 feet upstream from its confluence with the Colorado River.

FEDERALLY LISTED ENDANGERED, THREATENED, PROPOSED, AND CANDIDATE SPECIES

The species considered in this document are those federally listed as endangered, threatened, proposed, or candidate species that potentially occur in Glen Canyon National Recreation Area and areas that could be affected by road and bridge rehabilitation and stabilization activities. These species are collectively referred to as special status species. Although the environmental assessment included species listed by the state and Navajo Nation in its analyses of potential effects, this biological assessment only addresses federally listed, proposed, or candidate species. The species considered for this biological assessment are presented in table 1.

**Table 1: Special Status Species
with the Potential to Occur in Glen Canyon National Recreation Area**

Common Name	Scientific Name	Status ^{a/}	Suitable Habitat near Project?
Plants			
Navajo sedge	<i>Carex specuicola</i>	FT	No
Jones cycladenia	<i>Cycladenia humilis</i> var. <i>jonesii</i>	FT	No
Brady pincushion cactus	<i>Pediocactus bradyi</i>	FE	Yes
Fish			
Colorado pikeminnow ^{b/}	<i>Ptychocheilus lucius</i>	FE	Yes
Razorback sucker ^{b/}	<i>Xyrauchen texanus</i>	FE	Yes
Bonytail ^{b/}	<i>Gila elegans</i>	FE	Yes
Humpback chub ^{b/}	<i>Gila cypha</i>	FE	Yes
Birds			
California condor	<i>Gymnogyps californianus</i>	FE**	Yes
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE	Yes (marginal)
Mexican spotted owl	<i>Strix occidentalis lucida</i>	FT	Yes (marginal)
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	FC	No

^{a/} Key to status: FE = federally endangered; FE** = nonessential experimental population in northern Arizona; FT = federally threatened; FC = federal candidate for listing.

^{b/} These fish species are found in designated critical habitat in the Colorado River.

CRITICAL HABITAT

Species with potential to be affected by the proposed action and with designated critical habitat include the Colorado pikeminnow, razorback sucker, bonytail, humpback chub, California condor, southwestern willow flycatcher, and Mexican spotted owl. Designated critical habitat for the razorback sucker occurs downstream on the Colorado River from the confluence of the Paria and Colorado Rivers and has the potential to be affected by the proposed action. The potential effects to designated critical habitat for this species will be evaluated in this biological assessment. The proposed action would not affect designated critical habitats for the Colorado pikeminnow,

bonytail, humpback chub, California condor, southwestern willow flycatcher, or Mexican spotted owl because their designated critical habitats do not occur in or near the project site.

CONSULTATION TO DATE

Participating Agencies

The National Park Service is the lead agency for the Lees Ferry Road Rehabilitation and Paria River Bridge Stabilization environmental assessment and supporting documents, including this biological assessment. Design of the proposed action is being developed by the Federal Highway Administration under an interagency agreement with the National Park Service. Consultation with the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Arizona State Historic Preservation Office, Arizona Game and Fish Department, and Native American tribes affiliated with the recreation area contributes to the findings in the environmental and biological assessments. The correspondence between the National Park Service and U.S. Fish and Wildlife Service is attached to the end of this document.

Current Management Direction

Current management direction for the project area guided by the *Glen Canyon National Recreation Area General Management Plan* (NPS 1979). The plan established management zones, including land-based natural, cultural, and development zones and a recreation and resource utilization zone focused around Lake Powell. The proposed action would occur within the recreation area's development and cultural zones.

Statewide Conservation Agreement

In addition to the special status species included in table 1, six species of fish are protected under a conservation agreement with the Arizona Game and Fish Department (2006) that was signed by the National Park Service. These species include the roundtail chub (*Gila robusta*), headwater chub (*Gila nigra*), flannelmouth sucker (*Catostomus latipinnis*), Little Colorado River sucker (*Catostomus spp.*), bluehead sucker (*Catostomus discobolus*), and Zuni bluehead sucker (*Catostomus discobolus yarrowi*). The goal of the agreement is to ensure the conservation of these fish populations throughout Arizona. Although not all these species are found near the project area, actions taken in association with the proposed action would be consistent with the goals of the conservation agreement.

DESCRIPTION OF THE PROPOSED ACTION

The National Park Service proposes to rehabilitate the Lees Ferry Road and stabilize the banks of the Paria River near and upstream of the Paria River Bridge in Glen Canyon National Recreation Area.

Lees Ferry Road Components

Under the proposed action, the Lees Ferry Road would be restored, rehabilitated, and resurfaced. The entire 6-mile road would be pulverized, reshaped, compacted, and repaved with consistent lane widths. The radii of curves that are too tight would be widened by up to 4 feet.

The road profile would be raised by about 6 inches for approximately 4,700 feet, starting 0.6 miles north of the intersection of U.S. Highway 89A and Lees Ferry Road. This action would remove existing pavement undulations, provide a smoother driving surface, and improve the pavement structure. The concrete pad at the fee station would be removed as part of the proposed action.

Multiple pullouts provide vehicle parking for access to scenic viewpoints, trailheads, or other points of interest. Some of these pullouts are planned, paved parking areas, while others have developed over time as a result of use. Alternative B would close some of these pullouts and improve others:

- About 0.9 acres (39,429 square feet) of existing pullouts would be removed. All removed pullouts would be graded to blend with the landscape and revegetated.
- About 0.21 acres (9,099 square feet) would be paved to accommodate revised designs of pullouts at Cathedral Wash and Balanced Rock and to formalize a river overlook approximately 0.1 mile south of the Lees Ferry Campground turnout. Each of these pullouts would be approximately 300 feet long. Parking and pullout areas at Cathedral Wash and Balanced Rock would meet the Architectural Barriers Act Accessibility Standard so that people with impaired mobility could access the interpretive signs.
- In addition to the lengthened pullout at Cathedral Wash, the Cathedral Wash trailhead would be formalized. The trailhead change would allow pedestrians to access Cathedral Wash on the same side of the road as the pullout instead of crossing the road as is currently done.

Staging Areas

Construction materials would be stockpiled and construction equipment would be staged at various NPS-approved locations along the Lees Ferry Road. The primary staging area would be several hundred feet east of the Paria River Bridge along the Lees Ferry Road. Staging locations would be in existing and designated NPS maintenance yards and in areas along the road corridor that have been previously disturbed. Equipment and materials would be stored in areas approved by the National Park Service. The asphalt and concrete batch plant would be outside the national recreation area in a previously disturbed area and would not affect natural or cultural resources in or outside the national recreation area.

Drainage Components

Drainage improvements would occur along and across Lees Ferry Road, including culvert improvements, providing positive drainage along ditches, and installing revet mattresses (wire enclosed riprap) adjacent to the road to prevent future erosion at many locations. The following improvements would be made to drainage components along Lees Ferry Road.

- All paved ditches would be evaluated for effectiveness and rehabilitated or reconstructed accordingly. Existing U-shaped ditches would be replaced with straight-sloped paved ditch sections (with curb and gutter in the Cathedral Wash area). These types of paved ditch sections may also be used where new roadside drainage improvements were required. Revet mattress or loose riprap may be placed at the end of paved ditches to prevent future erosion.
- Curb reconstruction/extension would be completed as needed along the road to ensure fill slope protection.
- Solutions to preventing culvert cross-drains from becoming plugged with sediment would be implemented. Actions could include replacing some culverts with larger diameters and/or installing additional cross-culverts to improve drainage capacity. Additional solutions could include skewing cross-culverts relative to the road for improved hydraulic flow.
- Existing drop inlets along the roadside would be replaced with flared end sections.

The following actions would take place in areas along the Lees Ferry Road:

- Near Cathedral Wash, the existing pullout would be lengthened approximately 150 feet to the south to better accommodate visitor vehicles. Embankment protection, in the form of revet

mattresses and gabions (cylindrical wire baskets filled with rock), would be placed on the east bank of Cathedral Wash to protect the bank and the Lees Ferry Road from further erosion (see figure 4). Improvements associated with Cathedral Wash also would include outlet protection for the large box culvert under the road to prevent further erosion and scour.

- At No Name Wash, larger culverts sized to pass design discharges would be constructed to prevent road overtopping. Slope paving and a headwall would be installed to minimize erosion.
- Undermining of Lees Ferry Road a quarter-mile north of the Lees Ferry campground turnoff would be repaired by installing erosion protection using a gabion wall adjacent to the road.

Paria River Banks

Erosion stabilization along the banks of the Paria River would consist of added bank protection with channel spurs, also known as spur dikes, to deflect the strongest high-water flows away from the bank. A gabion retaining wall and revet mattresses would be installed to cover vulnerable slopes.

Northwest and Southwest Banks. The bridge headwalls would be extended and the area would be graded to force the runoff onto the existing slope paving to minimize erosion. The concrete slope paving at the toe of the slope would be extended to the bridge pier footing. Concrete slope paving would be constructed north and south of the Paria River bridge along the bank of the Paria River. The existing concrete slope paving at the abutments north and south of the western side of the bridge would be saw cut and tied into, extending the existing slope paving by a distance of approximately 35 feet.

East Bank. Bank protection would consist of a 1-foot-thick revet mattress placed on the riverbank (wire-enclosed riprap) at a 2 horizontal to 1 vertical slope, extending approximately 240 feet upstream from the existing left bridge abutment and incorporating two channel spurs upstream. Plan views of the preliminary design are shown in figures 5 and 6. The revet mattress would be underlain with a geotextile fabric and filled with 4- to 8-inch diameter rock. Larger riprap would be preferable, but is not locally available and hauling costs would be prohibitive. The toe of the revet mattress would be tied to a row of 3-foot by 3-foot gabion baskets embedded at least 6 feet below the minimum channel bed profile.

The channel spurs would reduce the risk of flanking of the revetment by limiting channel bank erosion immediately upstream of the revetment and redirecting the flood flows away from the susceptible banks. The spurs would extend into the channel approximately 30 feet from the top of bank, be embedded approximately 20 feet horizontally, and be at least 3 feet below the channel elevation at the bank line. The two spurs would be adjacent to an existing sandbar, with contact limited to flood level flows.

Bridge Abutment

Additional concrete would be added to the riverbed area under the bridge to stabilize the existing bridge abutment and minimize the potential for scour. Concrete lining with a low-flow channel for fish passage would be installed across the Paria River under the bridge abutment, including between the existing paved slopes. This area is approximately 45 feet long by 45 feet wide under the bridge. Approximately 6 inches of riverbed would be excavated to prepare the surface for placement of concrete. Toe walls would be installed on the upstream and downstream faces to prevent undercutting.

Lonely Dell Access Road

A gabion retaining wall at the Lonely Dell Access Road would stabilize the bank slope and restore the road section. In addition, two channel spurs would be installed to prevent further bank erosion. As shown in figure 6, the gabion wall would span approximately 40 feet of riverbank and be founded on the bedrock formation, which is approximately 15 feet below the road surface. The two channel spurs would be immediately upstream at approximately 50-foot intervals. They would be oriented downstream, extending into the channel approximately 20 feet from the top face of the bank and transitioning down to the channel bed.

Because of the highly erosive upstream bank, the spurs have a high risk of flanking (FHWA 2009). However, the other alternative is to armor a longer portion of the upstream channel, which would have greater environmental impacts and higher costs. Therefore, alternative B includes future maintenance of the spurs in response to channel migration.

The Lonely Dell Access Road could be closed for up to two weeks during construction of the bank stabilization. The adjacent parking area could be used for staging materials and equipment, but would be restored to its original condition following completion of the work. The construction contractor would maintain rough vehicular access around the excavation to facilitate construction, and this access could be used for emergency response, if needed. Staging and disturbance would be limited to the Lonely Dell Access Road prism and would not extend into the uphill cut-slope.

When it was necessary to perform work from within the riverbed, equipment would enter the river near the Paria River Bridge and travel through the riverbed. If riverbed access was unavailable, an alternate route using an old gravel-surfaced road east and south of the Lonely Dell work site would be used.

Concrete Removal

A concrete slab (24 feet x 10 feet with a thickness of 0.5 to 3 feet) is in the Paria River channel about 700 feet upstream from the proposed Lonely Dell channel improvements. The concrete was part of a road that previously crossed the Paria River. Alternative B would remove this slab and dispose of the waste outside Glen Canyon National Recreation Area. Because of the steep riverbanks at this location, it would be accessed through the riverbed by driving equipment up from the Lonely Dell work site. Work would be done during low flow to minimize impacts. Care would be taken to minimize disturbance to vegetation and the streambed when accessing and removing the concrete.

SPECIES ACCOUNTS

Of the special status species shown in table 1, only the Brady pincushion cactus, razorback sucker, California condor, southwestern willow flycatcher, and Mexican spotted owl are considered in detail in this biological assessment. The other species are not present in the project area or have no potential to be affected, as follows:

- *Navajo sedge* has been confirmed along the San Juan River in Glen Canyon National Recreation Area but does not occur in the Lees Ferry area. The *Jones cycladenia* is found in the Purple Hills and Moody Canyon areas about 100 miles upstream from Lees Ferry (Pilkington 2011). As a result, neither of these federally threatened plant species would be affected by the project.
- The *Colorado pikeminnow*, *bonytail*, and *humpback chub* generally occur in the Colorado River. These species would not be affected by the proposed action because there would be no meaningful or detectable change in hydrology or availability of water as a result of the proposed action. There would be temporary, localized water quality changes at the Paria River

and Colorado River confluence as a result of increased sediment loading. However, these changes would not be outside the natural range of variation caused by the area's extreme precipitation events. As a result, there would be no effect on these federally endangered fish species.

- The *yellow-billed cuckoo*, a candidate species, is considered a rare transient in dense riverside tamarisk thickets. Historically, the cuckoo has only been observed twice in the Lees Ferry area, with both occurrences in 1995 (Spence *et al.* 2011). The extremely low likelihood of a yellow-billed cuckoo being present in the project area, and its preference for mature riparian forest habitat (not found in the immediate project area), indicate that the cuckoo would not be affected by the project.

Brady Pincushion Cactus

The federally endangered Brady pincushion cactus is known from a geographical area of about 27 square miles in Coconino County, Arizona. This cactus grows in the restricted habitat of Kaibab limestone chips overlying soil derived from Moenkopi shale and sandstone outcrops. Chert and quartz pebbles eroded from the Shinarump member of the Chinle Formation are also present at some sites. The potential habitat in the Marble Canyon / Lees Ferry area is estimated to be 17,000 acres, but within this area, plants were identified on only 10%-20% of the potential habitat that was searched. The cactus typically grows between 3861 and 4488 feet elevation, generally the same as the elevation of the Kaibab Formation. The plants grow in gravelly alluvium on the gently sloping benches, in exposed, sunny situations (USFWS 1985). The actual area to be affected by project activities, including the road edges, was surveyed for this species in 2011 by the National Park Service (Spence 2012). This species was not located in the surveyed area. At one or two locations, the nearest plants were located about 300 to 500 feet east of the planned work locations.

Natural factors affecting the continued existence of the Brady pincushion cactus are its restriction to a unique, localized soil type, its restriction to flat or gentle slopes in an area that has very dissected topography, its rather low population level with resultant restricted gene pool, and its restriction to a small geographic area. Individual plants are subject to root rot, so this may be a factor in thinning the population during very wet years (USFWS 1985).

Critical Habitat Status. Critical habitat is not designated for the Brady pincushion cactus.

Effects. Based on the absence of this species in the planned work area, there would be no direct effect to this species. Prior to the start of project-related disturbance, staff would be educated about the locations that are near work areas and precautions would be implemented to avoid conducting work activities outside the authorized work that could inadvertently affect this listed species.

Cumulative Effects. The primary threats to Brady pincushion cactus include collection, off-road vehicle use, livestock grazing, and mining within habitat of populations on Federal lands (USFWS 1985). These activities are not present along the Lees Ferry Road or in the project area, thus the cacti are protected from their primary threats. There is a slight possibility that a person might accidentally drive outside the authorized work zone on the Kaibab limestone and adversely affect plants. This very unlikely event could be mitigated by informing the contractor to not allow any vehicle driving outside the authorized work zone. The effects of planned upgrades to telecommunication utility lines in the road corridor, access by fishermen, and tamarisk eradication projects have the potential to result in adverse cumulative effects, although each of these actions and projects have associated mitigation measures and best management practices that would minimize and avoid adverse impacts to listed plant species. The adverse cumulative effects of other plans and projects on the Brady pincushion cactus would be negligible. The proposed action would contribute to the potential

negligible adverse effect in a small way, if at all, because the mitigation measures to be implemented by this project would avoid impacts.

Conclusion and Determination of Effect. Although the endangered Brady pincushion cactus grows along the Lees Ferry Road corridor outside the planned construction zone, avoidance of those areas, would result in negligible adverse effects. Cumulative effects of other projects and plans in the area would have a negligible adverse effect and the proposed action would contribute little to this effect because of the presumed success of mitigation measures. The proposed action *may affect, but is not likely to adversely affect*, the Brady pincushion cactus.

Razorback Sucker

The razorback sucker, which is federally listed as endangered, is endemic to the Colorado River basin of the southwestern United States. The Colorado River is divided into upper and lower basins at Lees Ferry, Arizona, by the Colorado River Compact of 1922. Historically, the razorback sucker occurred throughout 3,500 miles of the Colorado River basin, primarily in the main stem and major tributaries in Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming; and in the states of Baja California Norte and Sonora of Mexico (USFWS 1991). In the lower Colorado River basin, razorback suckers occurred from the Colorado River delta upstream to Lees Ferry, Arizona (USFWS 1998). In the upper Colorado River basin, razorback suckers occurred in the Colorado, Green and San Juan River basins. Presently in the upper basin, the razorback sucker is restricted to about 750 miles (USFWS 1991) of the lower Yampa and Green Rivers, mainstream Colorado River, and lower San Juan River (USFWS 1994). In the lower basin, the species occurs only in Lake Mohave, upstream in Lake Mead and the Grand Canyon, and downstream sporadically on the main stem and associated impoundments and canals (USFWS 1991)

Habitats required by adults in rivers include deep runs, eddies, backwaters, and flooded off-channel environments in spring; runs and pools often in shallow water associated with submerged sandbars in summer; and low-velocity runs, pools, and eddies in winter. Spawning in rivers occurs over bars of cobble, gravel, and sand substrates during spring runoff at widely ranging flows and water temperatures (typically greater than 57°F). Spawning also occurs in reservoirs over rocky shoals and shorelines. Young fish require nursery environments with quiet, warm, shallow water such as tributary mouths, backwaters, or inundated floodplain habitats in rivers, and coves or shorelines in reservoirs. Threats to the species include streamflow regulation, habitat modification, competition with and predation by nonnative fish species, and pesticides and pollutants (USFWS 2002a).

It is unlikely that the razorback sucker is currently present in the Paria River. The last records of razorback suckers in the Paria River were in 1978 and 1979 when four fish were documented (USFWS 2011a). Additionally, surveys for flannelmouth suckers in the Colorado and Paria Rivers were performed from 1992 and 1997 and no razorback suckers were documented (Weiss 1993; McKinney *et al.* 1999). Nonetheless, because of the proximity to designated critical habitat in the Colorado River, the razorback sucker is retained for evaluation.

Critical Habitat Status. One segment of designated critical habitat in the Colorado River for the razorback sucker starts at the confluence of the Paria and Colorado Rivers (NPS 1994), about 0.5 mile downstream of the Paria River Bridge stabilization actions. Critical habitat does not occur in the proposed construction area.

Effects. The proposed action would use heavy construction equipment to install therevet mattresses and spur dikes. The equipment would access the bank locations to be stabilized through the Paria River channel at and upstream of the Paria River Bridge. This would cause temporarily increased sediment loads in the river and transport of the sediment downstream during construction activities. Some of this sediment could be carried to the Colorado River, about 0.5 mile downstream, depending on flow levels in the Paria. However, because high sediment loads also result from

relatively frequent extreme precipitation events and flash floods, this effect would not be outside the range of natural variation and would not represent an adverse effect for the razorback sucker. Conservation measures and construction best management practices (including, but not limited to clearly identifying limits of construction zones, complying with all federal and state hazardous material regulations, and implementing measures to prevent storm water pollution during construction activities) would ensure that toxic chemicals, such as spilled chemicals or fuel, would not enter the river.

The increase in sediment loading in the Paria River as a result of stabilization actions would not adversely impact constituent elements of the designated critical habitat. There would be no consequential adverse impacts because the sediment loading would not differ from sediment loads that result from precipitation events. In the long-term, the proposed action's erosion control measures would decrease sediment loading. Effects of the proposed action on the primary constituent elements of razorback sucker designated critical habitat, including water temperature, dissolved oxygen, turbidity, potential spawning habitat, food supply, and the presence of predators, would be inconsequential and discountable.

Cumulative Effects. Decline of the razorback sucker has been associated with major changes in its riverine ecosystem, including water diversion, water depletion, and construction and operation of dams. There are more than 10 dams along the lower Colorado River and its major tributaries (the Gila, Verde, and Salt Rivers). These dams and their related uses have dewatered, cooled, or impounded most of the lower basin system so that little natural riverine habitat exists today. The construction of dams and diversions has also prevented migration (USFWS 2011a). These long-term moderate to major adverse cumulative effects contributed to the baseline conditions that are experienced by the razorback sucker today. These past effects have been partially offset by recovery efforts and protection of critical habitat. As described above, the effects of the proposed action would not be different from the sediment loads generated by precipitation events and resulting flash floods. Thus, the proposed action would not contribute to the long-term, adverse cumulative effects of other plans and projects.

Conclusion and Determination of Effect. Although the endangered razorback sucker may be present in the Paria River and nearby in the Colorado River, the increased sediment loads in the rivers that would occur as a result of the proposed action would not have an adverse effect on the sucker. Cumulative effects of other projects and plans in the area would have minimal adverse effects outside baseline conditions, and the proposed action would not contribute to these long-term cumulative effects. The proposed action *may affect, but is not likely to adversely affect* the razorback sucker and its designated critical habitat.

California Condor

The California condor is federally listed as endangered, although the reintroduced population in northern Arizona is considered a nonessential experimental population (USFWS 1996).

California condors are among the largest flying birds in the world and the most endangered. Condors have a wingspan of 9.5 feet, and adults can weigh up to 25 pounds. California condors are opportunistic scavengers that feed primarily on large dead mammals such as deer, elk, bighorn sheep, range cattle, and horses (AGFD 2011a). A condor may eat up to 3 to 4 pounds at a time and may not need to feed again for several days. After eating, condors bathe in rock pools and will spend many hours preening and drying their feathers.

The California condor is a cavity-nesting species that requires caves, ledges, or large trees for nesting. High perches are necessary for roosting and to create the strong updrafts required for lift into flight. Open grasslands or savannahs are important to condors while searching for food. In Arizona, condors are found at elevations between 2,000 and 8,000 feet, and the reintroduction site is in the

northern part of the state on the Vermilion Cliffs. The Vermilion Cliffs are on the Paria Plateau and provide the necessary remoteness, ridges, ledges, and caves favored by condors.

Reproductively mature, paired California condors normally lay a single egg between late January and early April. At two to three months of age, condor chicks leave the nest cavity but remain near the nest where they are fed by their parents. The chick takes its first flight at about six to seven months of age, but may not become fully independent of its parents until the following year. Parent birds occasionally continue to feed a fledgling even after it has begun to make longer flights to foraging grounds (USFWS 2011b).

Critical Habitat Status. Designated critical habitat for the California condor exists in California in the selected areas (USFWS 1977) where the species is federally listed as endangered (in contrast with the nonessential experimental designation for the Arizona population). There is no designated critical habitat in the proposed construction area. As a result, the proposed action would have no effect on designated California condor critical habitat.

Effects. The potential for effects to the California condor by the proposed action is related to trash or food scraps that could be left by construction personnel and potential exposure to contaminated water. As scavengers, condors are readily attracted to any easily obtainable food or water source. As a result, the following conservation measures would be implemented in association with the proposed action:

- Construction workers and supervisors would be instructed to avoid interaction with condors and to immediately contact the Glen Canyon National Recreation Area, Division of Resource Management at 928- 608-6267 if a condors settle at the construction site.
- The construction site would be cleaned up at the end of each day (for example, trash removed and scrap materials picked up) to minimize the likelihood of condors visiting the site.
- All dead animals found within 500-feet of the construction zone would be immediately disposed of by placing the carcass in the nearest available dumpster. Dumpsters would be emptied on a regular basis so as not to encourage roosting by condors that may be attracted to odor coming from the dumpsters.
- To prevent water contamination and potential poisoning of condors, a spill prevention, control, and cleanup plan would be developed and implemented for this project. It would include provisions for immediate clean-up of any hazardous substance, and would define how each hazardous substance would be treated in case of leakage or spill. Any leaks or spills with potential to attract condors would be addressed. This plan would need to consider possible leakage from all equipment, materials, and vehicles being used. Contractors would need to provide a copy of the plan on compact disk to the environmental specialist at Glen Canyon National Recreation Area, P.O. Box 1507, Page, AZ 86040 least two weeks prior to start of construction (including preliminary set-up activities).
- Any project activity that may cause imminent harm to condors would be temporarily suspended until permitted personnel could assess the situation and determine the correct course of action.
- Prior to the start of project activities, Glen Canyon National Recreation Area staff would contact personnel (Peregrine Fund phone number: 928-355-2270) who have been monitoring condor locations and movement to determine the locations and status of condors in or near the project area.
- All project workers would be advised of the possibility of the occurrence of California condors in the project area.

- All project workers would be instructed to avoid interaction with condors and to immediately contact the appropriate Glen Canyon National Recreation Area or Peregrine Fund personnel if and when condors occur at the project area. To avoid injury both to condors and to personnel, project workers would not haze condors.
- If a condor occur at the project site, only permitted personnel would employ appropriate techniques to cause the condor to leave the site. “Permitted” personnel means those individuals with the necessary federal and state permits.

The implementation of these conservation measures would avoid adverse effects to California condors that may be found in the vicinity of the proposed action.

Cumulative Effects. Sufficient remaining habitat exists in California and in southwestern states to support a large number of condors, if density-independent mortality factors, including shooting, lead poisoning, and collisions with man-made objects, can be controlled. Most of these adverse impacts have been reduced through education and enforcement of protective regulations, although these factors have contributed to the current baseline conditions facing the condor. The possibility of eventual genetic problems, resulting from the species' recent perilously low population size, cannot be discounted. The potential adverse cumulative effects of future related actions on the condor continue to pose risks to the population, although recovery efforts have experienced a measure of success. The proposed action would not contribute to any future adverse cumulative effects on the condor.

Conclusion and Determination of Effect. The implementation and adherence to the mitigation measures presented above would result in a low likelihood of adverse effects to the California condor by the proposed action. The proposed action would not contribute to potential cumulative effects. As a result, the determination of effect of the proposed action would be *may affect, but is not likely to adversely affect* the California condor and there would be no effect to designated critical habitat.

Southwestern Willow Flycatcher

The southwestern willow flycatcher, federally listed as endangered, nests in dense riparian habitats along streams, lakesides, and other wetlands. Some of the most common plants used for nesting include willow, boxelder, tamarisk (salt cedar), Russian olive, buttonbush, cottonwood, and mesquite. Nests are found in dense thickets of these and other plant species that are about 12 to 24 feet high. Migration habitat is believed to occur primarily along riparian corridors. Nesting habitat is currently known to occur at elevations below 8,500 feet (USFWS 2011d).

Critical Habitat Status. Critical habitat was designated in 2005 (USFWS 2005) but is currently being revised. There is no designated critical habitat for the southwestern willow flycatcher near Lees Ferry or on the lower Paria River. The area around the bridge lacks any suitable habitat components, as it consists of sparse open low growing tamarisk and scattered willows next to fast moving and very muddy water in the Paria River. Suitable habitat would have to include very dense, tall, riparian vegetation adjacent to slow-moving water or pools, such as in eddies (Spence 2012). As a result, the proposed action would have no effects on designated southwestern willow flycatcher critical habitat.

Effects. The small tamarisk and willow thickets along the Colorado and Paria Rivers in the proposed construction area have some characteristics similar to the preferred habitat for the southwestern willow flycatcher. The unsuitable conditions for this species are reflected by reports of only three confirmed observations of the species in the Lees Ferry area (Spence *et al.* 2011), none of which occurred within 5 miles of the proposed construction area (Spence 2012). There is a slight possibility of an individual migrant bird could pass through the construction area as it follows the river valley. Because of the rare, transient presence of the southwestern willow flycatcher in the project area, and

the small area of unsuitable quality of riparian vegetation that would be affected by construction activities, it is unlikely there would be any adverse effects to the species as a result of the proposed action.

Cumulative Effects. The southwestern willow flycatcher was listed as endangered primarily due to the reduction, degradation, and elimination of riparian habitat from agricultural and urban development. Other reasons for the decline/vulnerability of the flycatcher include the fragmented distribution and low numbers of the current population; predation; cowbird brood parasitism; and other events such as fires and floods that are naturally occurring, but have become more frequent and intense as a result of the proliferation of exotic vegetation and degraded watersheds. The recent introduction, spread, and effect of the tamarisk-eating leaf beetle threatens the flycatcher by defoliating and killing nesting habitat. The leaf beetle has expanded into the southwestern United States and into the flycatcher's range beyond where the beetle was expected to survive and persist. Accidental and purposeful human transportation appears to be accelerating its distribution. Tamarisk often flourishes in areas where native tree growth is affected by land/water management actions (such as river damming, flow regulation, diversion, groundwater pumping, and over grazing). Because tamarisk provides structure and density, over half of all known flycatcher territories contain tamarisk. Loss of tamarisk vegetation without replacement by native trees will likely impact the flycatcher and other riparian obligate wildlife in Arizona (USFWS 2011d). All of the impacts described contribute to the baseline conditions for the southwestern willow flycatcher.

Biologists at Glen Canyon National Recreation Area forecast improvements to potential flycatcher habitat over the next 10 years as a result of a Lees Ferry restoration project just downstream from the boat ramp (Pilkington 2011). Also, the current revision of critical habitat designations, combined with actions consistent with the species' recovery plan (USFWS 2002b), represent beneficial cumulative impacts that would offset some of the continuing adverse effects.

The proposed action would not contribute to cumulative effects on the southwestern willow flycatcher.

Conclusion and Determination of Effect. Although the endangered southwestern willow flycatcher has been observed in the general Lees Ferry vicinity (Spence *et al.* 2011; Spence 2012), its presence can be considered rare and transient. The species does not currently breed near Lees Ferry. As a result, the proposed action would not contribute to cumulative effects on the flycatcher, and in the project area, the proposed action *may affect, but is not likely to adversely affect* the southwestern willow flycatcher and there would be no effect on its designated critical habitat.

Mexican Spotted Owl

The Mexican spotted owl, federally listed as threatened, has not been sighted in the Lees Ferry area (Spence *et al.* 2011), although the U.S. Fish and Wildlife Service indicated that the species may be found in nearby canyon habitats. A copy of the U.S. Fish and Wildlife Service letter is provided at the end of this document.

The Mexican spotted owl occurs in varied habitats, including mature montane forest and woodland, shady wooded canyons, and steep canyons. Potential modeled canyon habitat exists in the national recreation area, with the closest examples to the bridge located about 2 miles up the Paria River and 2.5 miles away in the Vermillion Cliffs (Spence 2012). In forested habitat, uneven-aged stands with a high canopy closure, high tree density, and a sloped terrain appear to be key habitat components. They also use mixed conifer and pine-oak vegetation types. The owl typically nests in older forests of mixed conifer or ponderosa pine/Gambel oak. Nests are built in live trees with natural platforms such as dwarf mistletoe brooms, in snags, and on canyon walls (AGFD 2011b).

Critical Habitat Status. Critical habitat is designated for the Mexican spotted owl (USFWS 2004), but none is within the range of effect of the proposed action. Therefore, the proposed action would have no effect on designated Mexican spotted owl critical habitat.

Effects. Because there is an extremely low likelihood that the Mexican spotted owl is present in the area that would be affected by the proposed action, effects on the species would be unlikely. The owl's preferred habitats do not exist within the boundary of or near the project. In the event that a transient Mexican spotted owl passed through the project area, there is a slight possibility that noise from construction activities might adversely affect an individual bird for a short time.

Cumulative Effects. The Mexican spotted owl was listed as threatened because of destruction and modification of its nesting habitat. One of the primary threats is believed to be unnatural fuel loadings and the resultant threat of high-severity, stand-replacing wildfire (USFWS 1995). Various projects that affect and modify its preferred nesting habitat, including logging, development, and habitat fragmentation activities, combine to have adverse cumulative effects on the owl. These conditions represent the baseline condition for the owl. However, there are no foreseeable plans or projects related to the proposed action that would contribute to these baseline conditions. The proposed action would not contribute to any cumulative effects.

Conclusion and Determination of Effect. Because of the extremely low likelihood that a Mexican spotted owl would be present in the area affected by the proposed action, there would be a small chance for the proposed action to affect the owl. Thus, the determination of effect from the proposed action on the Mexican spotted owl would be *may affect, but is not likely to adversely affect*. The proposed action would not contribute to cumulative effects on the owl as a result of other plans and projects. There would be no effect on its designated critical habitat.

LIST OF CONTACTS/CONTRIBUTORS/PREPARERS

Individual	Organization	Role
John Spence	NPS, Glen Canyon National Recreation Area	Provided biological information
Lonnie Pilkington	NPS, Glen Canyon National Recreation Area	Provided biological information
Ginger Molitor	NPS, Denver Service Center	Provided biological information
Don Kellett	Parsons	Prepared biological assessment
Aaron Sidder	Parsons	Prepared biological assessment

LITERATURE CITED

Arizona Game and Fish Department (AGFD)

- 2006 *Arizona Statewide Conservation Agreement for Roundtail Chub (Gila robusta), Headwater Chub (Gila nigra), Flannelmouth Sucker (Catostomus latipinnis), Little Colorado River Sucker (Catostomus spp.), Bluehead Sucker (Catostomus discobolus), and Zuni Bluehead Sucker (Catostomus discobolus yarrowi).* Prepared by the Arizona Game and Fish Department, Native Fish Program: T. N. Hedrick, C. J. Cantrell.
- 2011a California Condor Recovery website; accessed at http://www.azgfd.gov/w_c/california_condor.shtml.
- 2011b Mexican Spotted Owl website; accessed at <http://www.fws.gov/southwest/es/arizona/MSO.htm>.

Federal Highway Administration (FHWA), U. S. Department of Transportation

- 2009 *Summary of Channel Stabilization Alternatives, CHFLHD Project No. AZ GLCA 99(1), Lees Ferry Bridge Abutment Protection, Glen Canyon National Recreation Area, Coconino County, Arizona.* Technical memorandum from Scott Hogan, P.E. to Chris Longley, P.E., May 4.

McKinney, T., W. R. Persons, and R. S. Rogers

- 1999 "Ecology of Flannemouth Sucker in the Lee's Ferry Tailwater, Colorado River, Arizona." *Great Basin Naturalist* 59 (3): 259-265.

National Park Service (NPS), U.S. Department of Interior

- 1979 Glen Canyon National Recreation Area General Management Plan. Available on the Internet at <http://www.nps.gov/glca/parkmgmt/planning.htm>.
- 2001 *Director's Order #12 and Handbook: Conservation Planning, Environmental Impact Analysis, and Decision Making.* Washington, D.C. Available on the Internet at <http://home.nps.gov/applications/npspolicy/DOrders.cfm>.
- 2006 *Management Policies 2006.* Washington, D.C. Available on the Internet at <http://www.nps.gov/policy/MP2006.pdf>.

Pilkington, L.

- 2011 Personal communication (email) between Lonnie Pilkington, Natural Resource Program Manager, Glen Canyon National Recreation Area, and Don Kellett, Project Scientist, Parsons, regarding potential effects to special status species. September 16.

Spence, J.R.

- 2012 Personal communications (email) from John Spence, Glen Canyon National Recreation Area biologist to Ginger Molitor dated June 14.

Spence, J. R., C. T. LaRue, and J. D. Grahame.

- 2011 "Birds of Glen Canyon National Recreation Area, Utah and Arizona." *Monographs of the Western North American Naturalist* 5: 20-70.

U.S. Fish and Wildlife Service (USFWS), U.S. Department of the Interior

- 1977 "Final Rule: Correction and Augmentation of Published Rulemaking on Critical Habitats." *Federal Register* 42: 47840-47845). Available on the Internet at http://ecos.fws.gov/docs/federal_register/fr161.pdf
- 1985 *Brady Pincushion Cactus Recovery Plan.* U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 68 pp.
- 1991 "The Razorback Sucker (*Xyrauchen texanus*) Determined to be an Endangered Species." *Federal Register* (56) 205: 54957 - 54967.
- 1994 "The Determination of Critical Habitat for the Colorado River Endangered Fishes: Razorback Sucker, Colorado Pikeminnow, Humpback Chub, and Bonytail Chub." *Federal Register* 59: 13374-13400. Available on the Internet at http://ecos.fws.gov/docs/federal_register/fr2545.pdf.
- 1995 *Recovery Plan for the Mexican Spotted Owl: Vol. 1.* U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
- 1996 *California Condor Recovery Plan, Third Revision.* U.S. Fish and Wildlife Service, Portland, Oregon. 62 pp.

- 1998 *Razorback sucker* (*Xyrauchen texanus*) *Recovery Plan*. U.S. Fish and Wildlife Service, Mountain-Prairie Region, Denver, Colorado.
 - 2002a *Razorback sucker* (*Xyrauchen texanus*) *Recovery Goals: Amendment and Supplement to the Razorback Sucker Recovery Plan*. U.S. Fish and Wildlife Service, Mountain-Prairie Region, Denver, Colorado.
 - 2002b *Final Recovery Plan Southwestern Willow flycatcher* (*Empidonax traillii extimus*). Region 2, Albuquerque, New Mexico.
 - 2004 “Final Designation of Critical Habitat for the Mexican Spotted Owl.” *Federal Register* 69: 53182-53298). Available on the Internet at http://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/MSO/FR_MSO_CH_8_31_04.pdf.
 - 2005 *Designation of Critical Habitat for the Southwestern Willow Flycatcher, Final Environmental Assessment*. Available on the Internet at http://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/SWWF/CH_Final_Oct05/EA%20cover-main%20body.pdf.
 - 2011a *Final Biological Opinion on the Operation of Glen Canyon Dam including High Flow Experiments and Non-Native Fish Control*. Arizona Ecological Services Office.
 - 2011b California Condor Species Profile. U.S. Fish and Wildlife Environmental Conservation Online System (ECOS), accessed at http://ecos.fws.gov/docs/life_histories/B002.html
 - 2011c California condor species profile. U.S. Fish and Wildlife Environmental Conservation Online System (ECOS), accessed at http://ecos.fws.gov/docs/life_histories/B002.html.
 - 2011d Southwestern Willow Flycatcher Species profile. Arizona Ecological Services, Southwestern Willow Flycatcher website, accessed at <http://www.fws.gov/southwest/es/arizona/Southwes.htm>.
- Weiss, S. J.
- 1993 *Spawning, Movement, and Population Structure of the Flannelmouth Sucker in the Paria River*. Master of Science Thesis, University of Arizona, Tucson.



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IN REPLY REFER TO:
L7617

August 23, 2011

Mr. Steve Spangle, Field Supervisor
U.S. Fish and Wildlife Service
2321 West Royal Palm Road, Suite 103
Phoenix, AZ 85021

Subject: *Scoping Notice – Lees Ferry Road Rehabilitation and Paria River Bank Stabilization
Environmental Assessment, Glen Canyon National Recreation Area*

The National Park Service (NPS) will be preparing an environmental assessment (EA) which will analyze the environmental effects of rehabilitating the Lees Ferry Road and stabilizing the banks of the Paria River near and upstream of the Paria River Bridge in Glen Canyon National Recreation Area.

The purpose of the project is to enhance safety on the Lees Ferry Road by making lane widths consistent and resurfacing the roadway. Curve radii would be adjusted to meet safety standards where necessary and drainage issues also would be addressed. The banks of the Paria River just upstream of the Lees Ferry Road are eroding. This erosion endangers the support abutments and pier of the bridge over the Paria River as well as the adjacent Lonely Dell Access Road (about 1,000 feet upstream of the bridge and about 3,000 feet upstream of the confluence of the Paria River and the Colorado River). The project would stabilize the river banks and employ measures to minimize erosion near the bridge and along the Paria River's west bank below the Lonely Dell Access Road.

The project area, in Coconino County, Arizona, includes the Lees Ferry Access Road from its junction with US Highway 89A at Marble Canyon to about six miles northeast at the road's terminus and boat launch-ramp parking lot; the Paria River's banks and river bottom at and adjacent to the Paria River Bridge; and a site along the Paria River where it flows adjacent to the Lonely Dell historic area access road, about 0.5 mile upstream of its confluence with the Colorado River. Please refer to the attached Figures 1 and 2 for graphics showing the project location and proposed actions.

Potential solutions being considered to rehabilitate the road involve a resurfacing, restoration, rehabilitation (3R) project including milling and paving, minor curve widening (4-foot maximum), and drainage improvements along and across the road at many locations. Erosion stabilization (different from just the Paria River area) would consider several options including constructing the following:

- Rock filled wire baskets (gabions) as bank and streambed protection and gabion spur dikes for erosion protection;
- Continuous rock filled wire mat bank protection (revet mattresses) extending upstream about 240 feet from the east Paria River bridge abutment, with spur dikes upstream of the bank protection, the last one located approximately 400 feet upstream;
- Continuous bank and streambed protection under the bridge, with abutment slope paving;

- A retaining wall where the river begins to encroach on the Lonely Dell Access Road, with spur dikes upstream of the wall;
- Gabion spur dikes along the Lees Ferry Access Road just upstream of the Cathedral Wash crossing.

The Federal Highway Administration (FHWA), under an interagency agreement with the National Park Service, will engage a contractor to perform the 3R work and construct the bank and river bed protection on the Paria River.

We are requesting any information your office may have regarding the presence of listed Federal threatened, endangered, or candidate species, species proposed for listing, and designated or proposed critical habitats, which may be affected by this project within Glen Canyon National Recreation Area. This request is being made pursuant to Section 7 of the Endangered Species Act.

We look forward to your participation in this process and believe that it will help ensure that federally listed species are adequately considered and evaluated in the EA. In keeping with the requirements of Section 7 consultation and National Park Service policy, when the EA is complete, we will make a copy available for your review and comment.

We would appreciate any preliminary input you may have by September 26, 2011. If you have questions about the project or would like more information, please call Lonnie Pilkington, (928) 608-6269 or email Lonnie_Pilkington@nps.gov.

Comments can be sent to:

Superintendent, Glen Canyon National Recreation Area
ATTN: Tim Windle
Glen Canyon National Recreation Area
PO Box 1507
Page, AZ 86040

Sincerely,



Todd Brindle
Superintendent



United States Department of the Interior

U.S. Fish and Wildlife Service
Arizona Ecological Services Office
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 242-0210 Fax: (602) 242-2513



In reply refer to:
AESO/SE
22410-2011-I-0510

September 7, 2011

Memorandum

To: Superintendent, Glen Canyon National Recreation Area, Page, Arizona
From: Field Supervisor
Subject: Lees Ferry Road Rehabilitation and Paria River Bank Stabilization

Thank you for your August 23, 2011, memorandum regarding the subject proposed action in Coconino County, Arizona. The scoping notice memorandum stated that the National Park Service will prepare an environmental assessment of the proposed action. The memorandum also requested comments including information regarding listed species that may occur in the project area.

The project area includes the Lees Ferry Access Road from its junction with U.S. Highway 89A at Marble Canyon and northeast approximately six miles to the road terminus and boat-ramp parking lot. It includes the banks and river bottom of the Paria River at and adjacent to the Paria River Bridge. It also includes a site along the Paria River adjacent to the Lonely Dell historic area access road approximately 0.5 mile upstream of the confluence of the Paria and Colorado rivers. We offer the following comments.

The endangered Brady pincushion cactus (*Pediocactus bradyi*) occurs in or in the vicinity of the proposed project area.

A segment of critical habitat of the endangered razorback sucker (*Xyrauchen texanus*) includes the Colorado River and its 100-year flood plain from the confluence with the Paria River to Hoover Dam.

California condors (*Gymnogyps californianus*) may occur in the project area. We have previously provided you with conservation measures designed to prevent adverse interactions between humans and condors during implementation of projects. We recommend that appropriate measures be tailored for and implemented during the project. We are prepared to assist you in tailoring the conservation measures to this particular action.

Mexican spotted owl (*Strix occidentalis lucida*) canyon habitat may occur in the vicinity of the proposed action. We are prepared to assist you in determining whether Mexican spotted owl habitat exists in the project area or vicinity.

Southwestern willow flycatcher (*Empidonax traillii extimus*) habitat may occur in the Paria River in or in the vicinity of the proposed action. We are prepared to assist you in determining whether vegetation in the project area constitutes flycatcher habitat.

The State of Arizona and various American Indian Tribes maintain lists of sensitive species that may not be protected by Federal law. We recommend that you contact the Arizona Game and Fish Department (AGFD) and any affected Tribes to determine if sensitive species may occur in your action area. We also encourage you to invite the AGFD, any affected Tribes, and the BIA to participate in the review of your proposed action.

Thank you for the opportunity to provide initial scoping comments. If we can be of further assistance, please contact Bill Austin (x102) or Brenda Smith (x101) at (928) 226-0614.

Brenda H. Smith

for Steven L. Spangle

cc (hard copy):

Tim Windle, Glen Canyon National Recreation Area, Page, AZ
 Director, Cultural Resource Center, Chemehuevi Tribe, Havasu Lake, CA
 Cultural Compliance Technician, Museum, Colorado River Indian Tribes, Parker, AZ
 Director, Hopi Cultural Preservation Office, Kykotsmovi, AZ
 Director, Cultural Resources, Kaibab Band of Paiute Indians, Fredonia, AZ
 Director, Historic Preservation Department, Navajo Nation, Window Rock, AZ
 Environmental Specialist, Environmental Services, Western Regional Office, Bureau of
 Indian Affairs, Phoenix, AZ

cc (electronic):

Shaula Hedwall, Fish and Wildlife Service, Flagstaff, AZ
 Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
 Regional Supervisor, Arizona Game and Fish Department, Flagstaff, AZ

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As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

GLCA 608 112799 / July 2012



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GLCA 608 112798 / July 2012