

**National Park Service
U.S. Department of the Interior**

Glen Canyon National Recreation Area Arizona- Utah

**Lees Ferry Area Improvements
Final Environmental Assessment/Assessment of Effect
August 2006**



United States Department of the Interior

NATIONAL PARK SERVICE
Glen Canyon National Recreation Area
P.O. Box 1507
Page, Arizona 86040



IN REPLY REFER TO:

Dear Interested Party:

Enclosed with this letter is a copy of the *Lees Ferry Improvements Environmental Assessment* (EA) for a variety of projects proposed for the Lees Ferry area of Glen Canyon National Recreation Area (NRA). These projects, which would be completed over a 5 to 7 year time span, include: rehabilitate drainage structures located along Lees Ferry access road, including Cathedral Wash and No Name Wash; Lees Ferry compound upgrade; remove curb at graded raft launch ramp; replacement of floating courtesy dock; replacement of potable water intake at the Colorado River; install narrow band repeater for Grand Canyon National Park on the Paria Plateau overlooking Lonely Dell Ranch; establish the Arizona Road hiking trail; stabilize the Paria riverbank; and replacement of the USGS Gauging Station on the Paria River.

These projects are needed to replace, repair, or upgrade deteriorating utilities and facilities to ensure visitor and staff health and safety. Without these projects, visitor use and the visitor experience may be impacted.

The EA sections evaluate the alternatives in terms of potential impacts to the natural and cultural environment. Alternative A, the no-action alternative, describes current facilities. Alternative B proposes changes to the current facilities including repairs, replacements, and upgrades to utilities and facilities addressing future needs.

We welcome your review and comments during the public comment period from August 28 – September 28, 2006. The document is also available in electronic format on the internet at <http://parkplanning.nps.gov> or on compact disk by request. Printed copies are also available at the Page Public Library and at the visitor assistance desk at Glen Canyon NRA Headquarters Office located at 691 Scenic View Road in Page, Arizona.

If you wish to comment on the *Lees Ferry Improvements Environmental Assessment* you may mail comments to the name and address below or post comments online at <http://parkplanning.nps.gov>. The EA will be on public review for approximately 30 days. Our practice is to make comments, including names, home addresses, home phone numbers, and email addresses of respondents, available for public review. Individual respondents may request that we withhold their names and/or home addresses, etc., but if you wish us to consider withholding this information you must state this prominently at the beginning of your comments. In addition, you must present a rationale for withholding this information. This rationale must demonstrate that disclosure would constitute a clearly unwarranted invasion of privacy and unsupported assertions will not meet this burden. In the absence of exceptional, documented circumstances, this information will be released. We will always make submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Please address comments to Glen Canyon National Recreation Area, ATTN: Lees Ferry Improvements EA, P.O. Box 1507, Page, Arizona 86040. For more information about this project, please contact the Park at 928-608-6200.

Thank you for your time and interest in Glen Canyon NRA.

Sincerely,

Kitty L. Roberts
Superintendent

Enclosure

Environmental Assessment/ Assessment of Effect

Lees Ferry Improvement Alternatives Glen Canyon National Recreation Area • Arizona- Utah

SUMMARY

This Environmental Assessment/Assessment of Effect (EA/AE) was prepared in response to the need to undertake a variety of tasks designed to improve visitor use and satisfaction at the Lees Ferry Developed Area of Glen Canyon National Recreation Area (Glen Canyon NRA).

Two alternatives were developed and analyzed: Alternative A, the No Action Alternative and Alternative B, the Action Alternative. Under the No Action Alternative specific management actions would not be undertaken and the projects included in this EA would not be approved and funded. The Action Alternative includes replacement of a variety of utilities and facilities as well as stabilization of the bridge over the Paria River and the access road to Lonely Dell Ranch and the installation of a radio repeater to improve health and safety of visitors and staff.

PUBLIC COMMENT

If you wish to comment on the environmental assessment, you may mail comments to the name and address below, enter comments into the National Park Service Planning, Environmental and Public Comment website. This environmental assessment will be on public review for 30 days. It is the practice of the NPS to make all comments, including names and addresses of respondents who provide that information, available for public review following the conclusion of the environmental assessment process. We will make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety.

Submit written comments to:
Lees Ferry Improvement
Alternatives EA
Glen Canyon National
Recreation Area
P.O. Box 1507
Page, AZ 86040- 1507

Comment by the internet through
the National Park Service's
Planning, Environmental and
Public Comment website at:
<http://parkplanning.nps.gov>

Hand- deliver comments
to the NRA headquarters
at:
691 Scenic View Drive
Page, AZ

United States Department of the Interior • National Park Service • Glen Canyon National
Recreation Area

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SECTION I

PURPOSE AND NEED

Introduction

This Environmental Assessment is being undertaken to identify and mitigate environmental impacts likely to be created by the construction and/or rehabilitation/repairs of the following projects: Repair of the rafting ramp access, Replacement of the courtesy dock, Demolition and replacement of the Grand Canyon National Park (NP) contact station; Replacement of the water treatment facility, Construction of the maintenance facilities, Stabilization to the Paria riverbank at the access road bridge, Creation of the Arizona Road Hiking Trail, Repairs and improvements to the Lees Ferry access road drainage system, Replacement of the USGS Gauging Station on the Paria River and installation of a Narrowband Radio Repeater on the Cliff overlooking the Paria River. These facilities are generally in poor repair as more than minimal maintenance has been deferred due to lack of funding. Improvements will provide replacement of poorly functioning visitor facilities as well as provide long term protection of important cultural resources. These projects will also increase visitor safety and enhance their enjoyment of the Lees Ferry area. These facility improvements are also needed to support the number of visitors expected to use the area.

The Colorado River corridor in Glen Canyon NRA is canyon- bound for its entire length below Glen Canyon Dam with the exception of its ending point at Lees Ferry. Here the river is accessible by road due to a natural break in the landscape after the river emerges from Glen Canyon and before it enters the Marble Canyon section of Grand Canyon. Glen Canyon Dam is located approximately 15 river miles upstream of Lees Ferry and is operated by the Bureau of Reclamation. This dam affects the volume, pattern, temperature, and sediment load of river flows through Glen Canyon NRA and Grand Canyon NP. The climate of the river corridor is generally arid; average annual precipitation is just over six inches. Precipitation comes in the form of summer thundershowers and gentle winter rains; snow occurs infrequently (less than 2.1 inches of annual average total snowfall). Temperatures are hot in the summer, with the average July maximum at Lees Ferry exceeding 103.4°F. Winter temperatures are relatively mild, with the January maximum at Lees Ferry averaging about 48.7°F and the minimum averaging about 26.8°F (Western Regional Climate Center 2003).

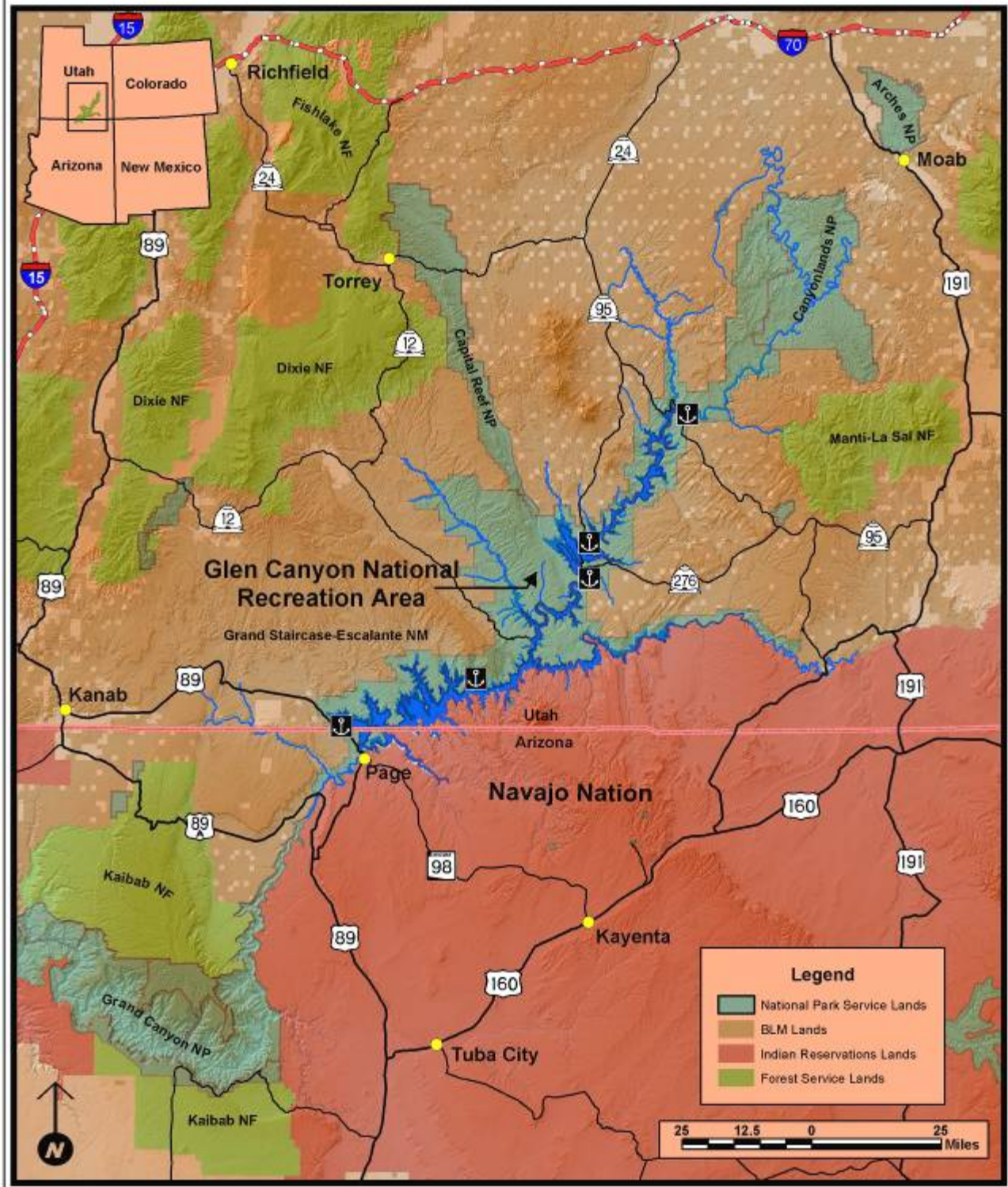
Current Management

Management decisions for the Lees Ferry area are based on the 1979 General Management Plan for Glen Canyon National Recreation Area and the 1986 Final Development Concept Plan (DCP) for Lees Ferry, Arizona.

Enabling Legislations

Glen Canyon NRA was established by enactment of Public Law (PL) 92- 593 on October 27, 1972. The legislation defines the purposes of the recreation area: “. . .to provide for public outdoor recreation use and enjoyment of Lake Powell and lands adjacent thereto. . . and to preserve scenic, scientific, and historic features contributing to public enjoyment of the area” (NPS 1979).

Map 1: Glen Canyon NRA Area Map



Laws, Policies, and Authorities

The following regulations and guidance documents guide the planning and completion of the projects proposed in this EA.

National Environmental Policy Act (NEPA) – The purpose of NEPA is to encourage productive and enjoyable harmony between humans and the environment; to promote efforts which will prevent or eliminate damage to the environment and stimulate the health and welfare of humankind; and to enrich the understanding of the ecological systems and natural resources important to the Nation. NEPA requirements are satisfied by completion of a Categorical Exclusion (Catex), Environmental Assessment (EA), Environmental Impact Statement (EIS), or a memo to the files documenting existing NEPA work that covers the current proposed activity. In the case of an EA or EIS, NEPA requirements are met by successful completion of the document and an accompanying decision document.

Director's Order- 12 (DO- 12) – DO- 12 is the NPS guidance for Conservation Planning, Environmental Impact Analysis, and Decision Making. DO- 12 states the guidelines for implementing NEPA according to NPS regulations. DO- 12 meets all Council on Environmental Quality (CEQ) regulations for implementing NEPA. In some cases, the NPS has added requirements under DO- 12 that exceed the CEQ regulations.

NPS Organic Act of 1916 – Congress directed the U.S. Department of the Interior and NPS to manage units “to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (16 USC § 1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that the NPS must conduct its actions in a manner that will ensure no “derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress (16 USC § 1 a- 1).

- **Clean Water Act/Regulations** – provides national recommended ambient water quality criteria and calls for no degradation of the nation's surface waters.
- **Arizona and Utah Water Quality Regulations** – conserves waters of the states to protect, maintain and improve water quality.
- **Safe Drinking Water Act** - The SDWA authorizes the Environmental Protection Agency (EPA) to set maximum contaminant levels (MCLs) for dangerous chemicals, waterborne bacteria and viruses in the public's drinking water.
- **Executive Order 11990** – provides for the protection of wetlands.
- **Executive Order 11988** – provides for the protection of floodplains.
- **Clean Water Act and Section 404 Regulations** – provides for the protection of wetlands and waters of the United States.
- **Endangered Species Act/Section 7** – provides for the listing and protection of endangered and threatened species and their critical habitat; requires consultation under Section 7 if any listed species may be adversely affected.
- **National Historic Preservation Act (NHPA)/Section 106** – provides for the identification and protection of historic sites and structures.

- **Archeological Resource Protection Act** – provides for the protection of archeological resources on public lands.
- **Executive Order 13007** – provides for protection of Indian sacred sites.
- **NPS Director's Order #28, *Cultural Resource Management Guidelines* (1998b)** – defines how the NPS will protect and manage cultural resources on NPS lands in accordance with the NPS Management Policies.

Relationship to Other Plans

Glen Canyon National Recreation Area Colorado River Master Plan

The Colorado River from Glen Canyon Dam to Lees Ferry presents an excellent opportunity to create high- quality habitat for wildlife and avifaunal species. This area is highly valued for its natural features and recreational activities; however, since the invasion of non- native vegetation—particularly tamarisk—the ecological function of the system has been compromised. Dynamic native riparian and wetland ecosystems are renowned for their high levels of biodiversity and productivity. As these ecosystems become increasingly imperiled by extensive modification and non- native species invasion, the need for restoration has also become increasingly urgent. This project is designed to meet two primary goals. The first is to develop a 20- year master plan for restoring riparian vegetation in Glen Canyon NRA by replacing non- native tamarisk with native vegetation. The second goal of this project is to implement the first phase of this master plan by restoring a 6- acre pilot site. NPS officials can use this master plan as a roadmap that provides direction for future restoration efforts in the 15- mile river corridor between Glen Canyon Dam and Lees Ferry. This plan should help guide management decisions by:

- Identifying revegetation sites and prioritizing them
- Recommending restoration methods and presenting options
- Estimating costs associated with various restoration methods
- Identifying potential funding sources
- Recommending long- term monitoring strategies

Replacing tamarisk with native vegetation at the pilot site will stabilize stream banks as well as restore and enhance its native biodiversity, ecological function, and indigenous riparian habitat characteristics. The pilot site would not only create essential habitat for avifauna and wildlife, but it will also enhance recreational opportunities, generate a crucial stock native seed for downstream dispersal, and provide a model for other restoration efforts throughout the southwest. Restoration efforts will strive to reflect the original character of the riparian setting as best as possible under current hydrologic conditions.

Grand Canyon National Park Colorado River Management Plan

The Final Environmental Impact Statement/Colorado River Management Plan describes and analyzes alternatives for the management of recreational use of the Colorado River in Grand Canyon NP. For purposes of this plan, the Colorado River has been divided into two geographic sections, with a specific set of alternatives for each section. For the upper section from Lees Ferry (River Mile [RM] 0) to Diamond Creek (RM 226), the plan considers eight alternatives, including a no- action alternative (Alternative A) and a preferred alternative (Modified Alternative H). For the Lower Gorge section from Diamond Creek (RM 226) to Lake Mead (RM 277), the plan considers five alternatives, including a no- action alternative (Alternative 1), a National Park Service preferred alternative (Modified Alternative 4), and a Hualapai Tribe

proposed alternative (Alternative 5). The park shares a common boundary with the Hualapai Tribe along 108 miles of the Colorado River, and the Hualapai Tribe is a cooperating agency in the preparation of the Environmental Impact Statement. For the Lees Ferry alternatives, the alternatives represent different mixes and limits of group size, trip length, launches per day, user- days, seasonal variations, motorized and - use, commercial and noncommercial use, and other factors. Major issues addressed in the alternatives include the appropriate level of visitor use consistent with natural and cultural resource protection and visitor experience goals; allocation of use between commercial and noncommercial groups; the noncommercial permit system; the level of motorized and non- motorized boat use; the range of services provided to the public; the use of helicopters to transport river passengers to and from the river; and appropriate levels and types of upstream travel from Lake Mead. The National Park Service's preferred alternative (Modified Alternative H) provides for a mix of motorized and non-motorized use, at least six- months of non- motorized use season, more evenly distributed launch patterns, and changes permit systems and allocation.

Glen Canyon National Recreation Area General Management Plan (GMP)

The Glen Canyon NRA GMP identified zones which define how different areas of the recreation area will be managed to achieve desired resource conditions and meet the recreation area's goals and objectives. The recreation area is divided into four zones: 1) Natural Zone, 2) Recreation and Resource Utilization (RRU) Zone, 3) Cultural Zone, and 4) Development Zone. Actual size of the Natural and RRU Zones varies with fluctuations in the level of Lake Powell. Due to the vast size of the recreation area and the lack of a formal boundary survey of the entire area, actual size of each zone (in acres) varies slightly from the numbers recorded in the GMP in 1979. Current acreage of each zone has been slightly modified as mapping technology has improved. The maximum allowable acreage for the recreation area as stated in Glen Canyon NRA legislation is 1,256,000 acres.

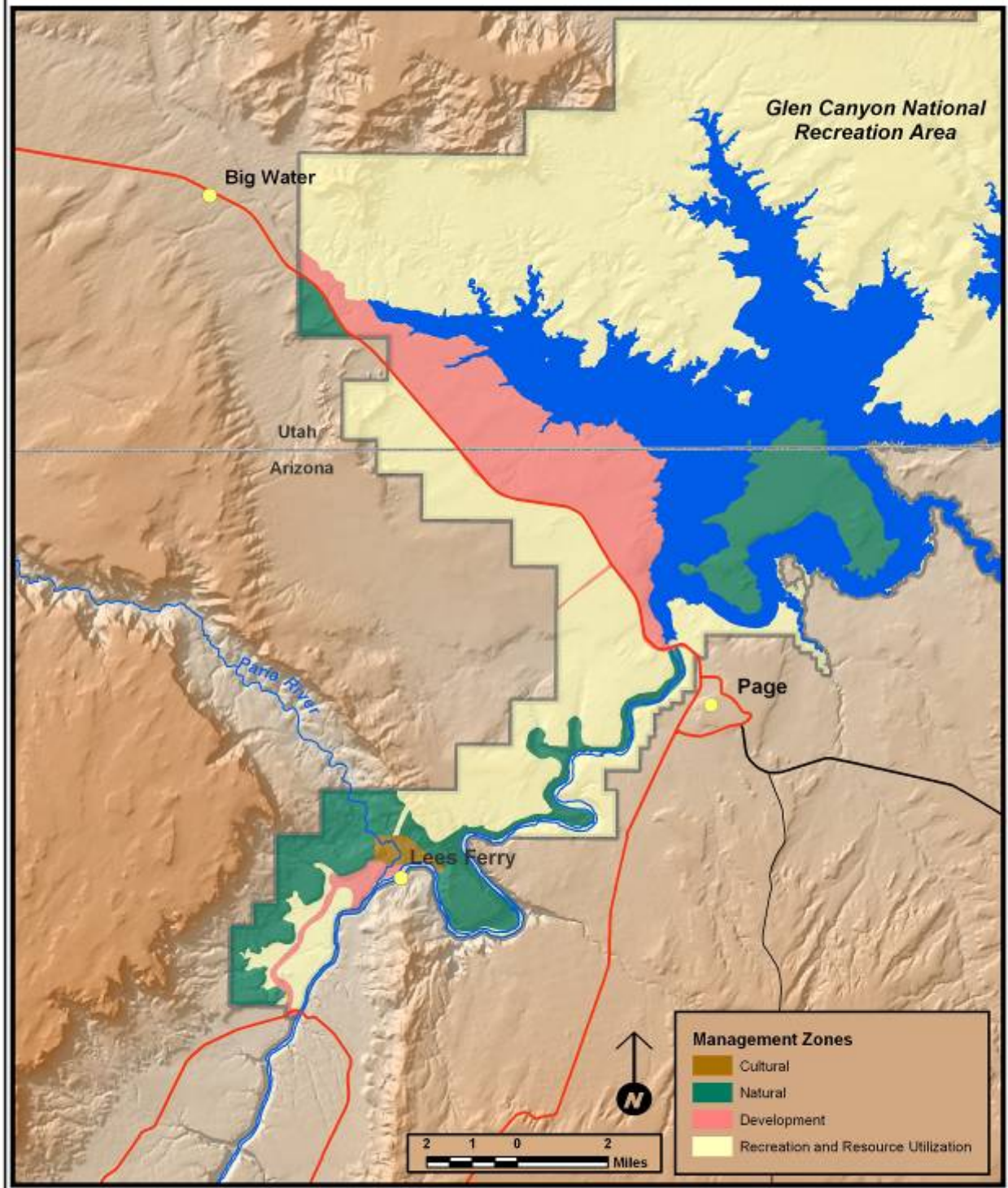
The Natural Zone (approximately 668,670 acres) includes the recreation area's outstanding scenic resources, relatively undisturbed areas isolated and remote from the activities of man, or areas bordering on places with established land- use practices complementary to those of the Natural Zone. In this zone, management focuses on maintaining isolation and natural processes while allowing grazing activities.

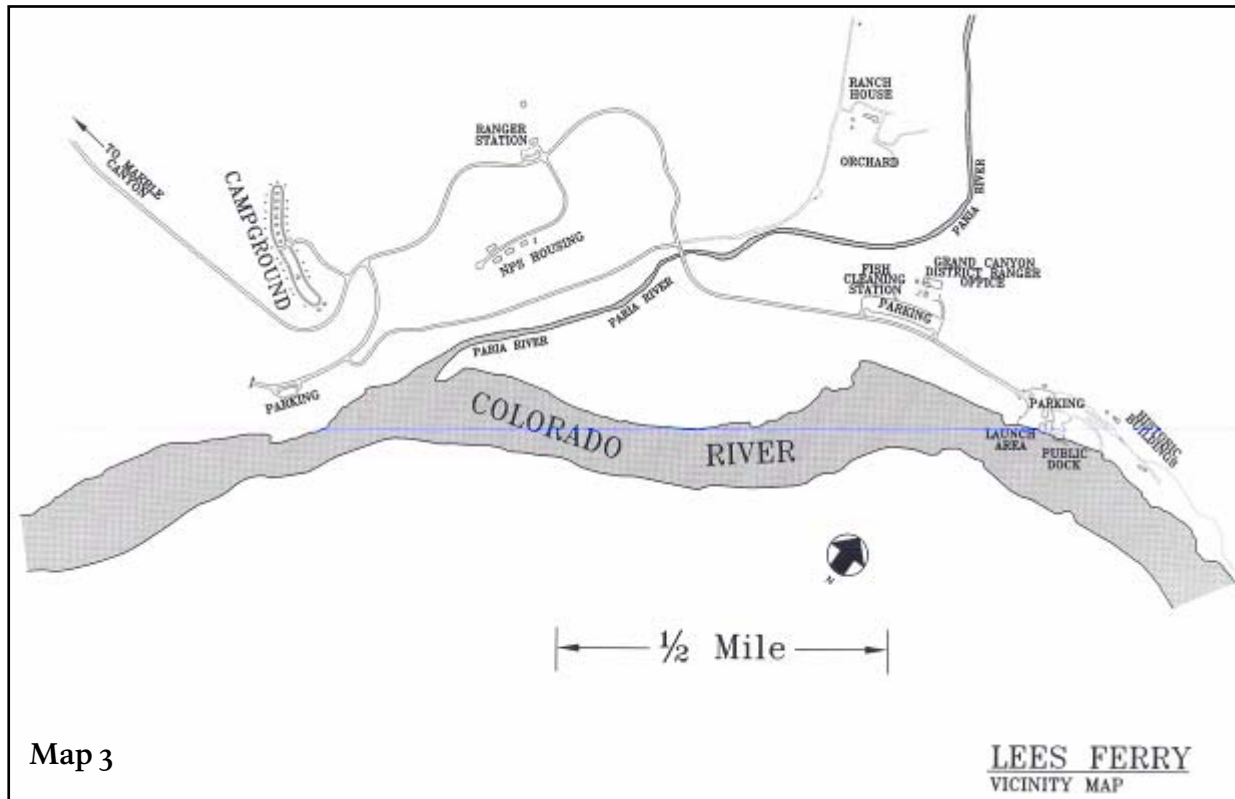
The RRU Zone (approximately 557,890 acres) consists of areas possessing somewhat less scenic value for utility rights- of- way or development. These areas are characterized by maintenance of natural processes while allowing to the extent possible both mining and grazing.

The Cultural Zone (approximately 450 acres) consists of areas where the most important management actions are the preservation, interpretation, and restoration of historic and archeological resources.

The Development Zone (approximately 19,270 acres) centers around the existing developed areas including Lees Ferry. In this zone the provision of visitor services and maintenance of facilities is practiced.

Map 2: Management Zones in Glen Canyon NRA





Planning Team and Public Scoping

Glen Canyon NRA staff conducted both internal scoping and external scoping with the public and interested and affected groups and agencies. The NPS identified members of an internal interdisciplinary team (ID team), which met several times in the spring of 2006 to discuss project objectives, issues, impact topics, possible alternatives, and the results of public scoping. The team consisted of park division managers from Glen Canyon NRA and Grand Canyon NP as well as specialists in cultural resources, natural resources, maintenance, visitor protection rangers and Native American relations.

The objectives, issues, and impact statements and alternatives described in this document were identified by the team and described in a public scoping newsletter that was issued in April 2006 (Appendix A). Concurrently, consultations with the U.S. Fish and Wildlife service (USFWS), the Arizona State Historic Preservation Officer (SHPO), and Native American tribes were initiated. Staff also held impromptu discussions with 64 members of the public during May 2006. Based on the responses received and subsequent ID team communications, the impact topics and action alternatives were refined and finalized prior to analysis.

Much of the internal and public scoping comments centered on the use of the rafting ramp and adjacent camping area and how they were being impacted by the increase in visitor use and launch changes due to the Grand Canyon NP's Colorado River Management Plan. It became obvious very quickly that the issues related to management of this area are complex and need to be reviewed in depth and, therefore, fell outside of the range of this EA and would be better addressed in a separate management plan and associated NEPA document. It was also

determined that the request to concrete the rafting ramp was intertwined in these issues and was therefore removed from this EA.

Due to unforeseen project delays, the planning effort for the Rehabilitation of the Weaver Ranch House could not be completed in time for inclusion in this EA, therefore all references to this project have been removed from this EA and will be included in future NEPA documentation. It was also determined that NEPA documentation for the rehabilitation to the 11 buildings in the historic district has already been completed and therefore they were also deleted from this EA.

Projects were also added to this EA, including: Replace USGS Gauging Station, Install Narrowband Radio Repeater on Paria Plateau Overlooking Lonely Dell Ranch, create the Arizona Road Hiking Trail and Improve access to Graded Raft Ramp. A specific public request to improve access to the south side of the rafting ramp by removing the original curb and gutter in order to provide straight in and out access to private boat parties was reviewed favorably and has been included in this EA.

Due to the proposed changes throughout the Lees Ferry/Lonely Dell (LFLD) National Register Historic District, a new interpretive plan is also being proposed. This plan identifies ways the park staff would interact with the visitors and what information they will provide and how it will be provided. Possible changes include new information kiosks, regular ranger lead events, and new information brochures, etc.

Additional details concerning public scoping and consultation documented for this project are provided in the Consultation/Coordination chapter of this EA, following the impact assessment.

National Historic Preservation Act, Section 106 Consultation Summary

In accordance with Section 106 of the National Historic Preservation Act (NHPA), is required to consult with the appropriate State Historic Preservation Office (SHPO) on possible impacts to historical properties. A field consultation meeting was conducted March 23, 2006 with Mr. Bill Collins of the Arizona SHPO and the staff from the Cultural Resources group from Glen Canyon NRA. This meeting focused on the array of projects included in this EA and their possible impacts to the LFLD Historic District and during this discussion, Mr. Collins stated that he didn't think any of the proposed projects would have an adverse affect (per section 106 of the NHPA) on the LFLD Historic District.

Endangered Species Act, Section 7 Consultation Summary

In accordance with Section 7 of the Endangered Species Act (ESA), Glen Canyon NRA is required to consult with representatives of the United States Fish and Wildlife Service (USFWS) on the possible impacts to threatened and/or endangered species. An informal consultation meeting was held at Lees Ferry on May 25, 2006 with Mr. Bill Austin of the USFWS. This meeting resulted in a letter from the USFWS outlining their concerns and mitigation suggestions. These suggestions were incorporated into this EA and a copy of their letter can be seen in Appendix B.

Impact Topics

Impact topics were used to focus on the evaluation of the potential consequences of the proposed alternatives. Impact topics were identified based on legislative requirements, topics specified in Director's Order #12 and Handbook (NPS 2001a), and park- specific resource information. Table 1 lists impact topics that were considered for analysis, whether or not each topic was retained for further analysis or dismissed, and the regulations and policies relevant to each topic. Following the table, reasoning is given for the dismissal of those topics that will not be analyzed further.

Table 1: Impact Topics Considered for the Lees Ferry Improvement Alternatives		
Environmental Assessment		
Impact Topic	Retain or Dismiss*	Relevant Regulations or Policies
Air quality	Dismiss	Federal Clean Air Act (CAA), CAA Amendments of 1990 (CAAA), NPS Management Policies 2001, and Utah Administrative Code, Title 307, Arizona Administrative Code, Title 18
Soils	Dismiss	NPS Management Policies
Vegetation	Retain	NPS Management Policies
Water Resources	Retain	Clean Water Act, Executive Order 12088, NPS Management Policies
Wetlands and Waters of the U.S.	Retain	Clean Water Act, Executive Order 12088, NPS Management Policies
Drinking Water	Retain	Clean Drinking Water Act, NPS Management Policies
Floodplains	Retain	Executive Order 11988, Executive Order 11990, Rivers and Harbors Act, Clean Water Act, NPS Management Policies
Wildlife	Retain	NPS Management Policies
Threatened and endangered species	Retain	Endangered Species Act, NPS Management Policies
Paleontological resources	Dismiss	NPS Management Policies
Cultural resources	Retain	Section 106, National Historic Preservation Act (NHPA), Historic Sites Act, Archeological Resource Protection Act, Native American Graves and Protection Act, Director's Order 28, Director's Order 12, Executive Order 13007, NPS Management Policies
Wilderness	Dismiss	Director's Order 41, NPS Management Policies
Ecologically critical areas or other unique natural resources	Dismiss	Wild and Scenic Rivers Act, 36 CFR 62 criteria for national natural landmarks, NPS Management Policies
Visitor use and experience	Retain	Organic Act, NPS Management Policies
Public health and safety	Retain	NPS Management Policies
Indian Trust Resources	Dismiss	Department of the Interior Secretarial Order No. 3206, Secretarial Order No. 3175
Prime and unique agricultural lands	Dismiss	Council on Environmental Quality (CEQ) 1980

Table 1: Impact Topics Considered for the Lees Ferry Improvement Alternatives Environmental Assessment		
Impact Topic	Retain or Dismiss*	Relevant Regulations or Policies
		memorandum on prime and unique farmlands
Conflicts with land use plans, policies, or controls	Dismiss	NPS Management Policies
Socioeconomics	Dismiss	40 CFR 1500 Regulations for Implementing NEPA
Energy requirements and conservation potential	Dismiss	NPS Management Policies
Environmental justice	Dismiss	Executive Order 12898

Rationale for Dismissal:

Air Quality: is considered a Class II airshed by the EPA. None of the proposed projects would have the ability to raise the constituent elements above the current National Ambient Air Quality Standards. Additionally, the proposed projects consist of construction projects that would not have even minor short term impacts.

Soils: None of the proposed project would impact the stability or type of native soils that occurs within the analysis area.

Paleontological Resources: There are no known paleontological resources within the analysis area.

Wilderness: There are no designated wilderness areas within the analysis area.

Indian Trust Resources: Indian trust assets are owned by Native Americans but held in trust by the United States. Requirements are included in the Secretary of the Interior's Secretarial Order No. 3206, "American Indian Tribal Rites, Federal—Tribal Trust Responsibilities, and the Endangered Species Act," and Secretarial Order No. 3175, "Departmental Responsibilities for Indian Trust Resources." The Bureau of Indian Affairs (BIA) and the National Park Service have formed a joint agency, the National Interagency Fire Center (website, <http://www.nifc.gov>) to handle wildfire management on Indian trust lands based on fire management plans approved by the Indian landowner. Indian trust assets do not occur within Glen National NRA.

Prime and unique agricultural lands: Prime farmland is defined as soil that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Unique land is land other than prime farmland that is used for production of specific high-value food and fiber crops. Both categories require that land is available for farming uses. According to the Natural Resources Conservation Service (NRCS), none of the land within Glen Canyon NRA meets these requirements; therefore prime and unique agricultural lands was dismissed as an impact topic.

Conflicts with land use plans, policies, or controls: Refer to the section "Relationship to Other Plans" for a discussion on the absence of conflicts with other plans.

Socioeconomics: The proposed action and alternatives do not have the potential to affect the economic condition of Coconino County, AZ; therefore socioeconomics was dismissed as an impact topic.

Energy requirements and conservation potential: Refer to the impact topic “Sustainability and long- term management” for a rationale for dismissal of this topic.

Environmental justice: Executive Order 12898, “General Actions to Address Environmental Justice in Minority Populations and Low- Income Populations,” requires that all federal agencies address the effects of policies on minorities and low- income populations and communities. None of the alternatives would have disproportionate health or environmental effects on minorities or low- income populations as defined in the Environmental Protection Agency’s Draft Environmental Justice Guidance (July 1996).